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**VAULT DWELLER'S
SURVIVAL GUIDE**



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VDSG VTB-001-13

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SURVIVAL GUIDE**

**ISSUED BY VAULT-TEC DOCUMENTATION
DEPARTMENT, JANUARY, 2077**

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**Section I. WELCOME TO
THE VAULT OF THE FUTURE**

1



VD SG VTB-001-13-1

GENERAL

Welcome to Vault-13, the latest in a series of public defense works from Vault-Tec, your contractor of choice when it comes to the best in nuclear shelters. Vault-Tec, America's Final Word in Homes. This document, VTB-001, the Vault Dwellers Survival Guide, is for the events following a world-wide nuclear war. In the case of a limited scale nuclear war, or other world ending catastrophe, please refer to the appropriate documentation (see also page 1-8):

End of World Cause	Document #	Title
Limited Scale Nuclear War	VTB-002	<i>Vault Dwellers Survival Guide (abridged version)</i>
Disease	VTD-001	<i>Coping with Mr. Virus!</i>
Starvation	VTR-003	<i>How to Eat Rat</i>
Flooding	VTF-100	<i>Flotation Homes & Seaweed</i>
Meteor	VTM-020B	<i>How to Dodge Falling Rocks*</i>

*Document not available at this time, will be available the 3rd quarter of 2078.

Don't let what could have happened bother you. We have enough problems to deal with in the here and now.
overseer

The Vault series of survival shelters are designed from the ground up to provide the best chance for a good life following nuclear armageddon. It is the duty of every American citizen to learn and use the skills necessary for a comfortable Vault life. The best place to start is with a description of your new home.

IMPORTANT VAULT STATISTICS

Vault Number13
Starting construction dateAugust 2063
Ending construction dateMarch 2069
Starting Budget\$400,000,000,000
Final Budget, with interest ...\$645,000,000,000

Total number of occupants1,000 (at capacity)
Total duration10 years (at capacity)
Number of living quarters100 (hot bunking required if at maximum capacity)

Door thickness	4 yards, steel
Earth coverage	3,200,000 tons of soil, at 200 feet
Computer control system	Think machine
Primary power supply	Geo-thermal
Secondary power supply	General Atomics Nuclear Power backup systems
Power requirements	3.98mkw/day
Stores	Complete construction equipment, hydro-agricultural farms, water purification from underground river, defensive weaponry to equip 10 men, communication, social and entertainment files (for total duration)

NUCLEAR BLAST EFFECTS

Vault-13 is designed to provide protection from the effects of a nuclear blast. To better understand the protection provided, we have included a section from the High Energy Weapons FAQ that explains how a nuclear blast causes damage.

The first thing bomb victims experience is the intense flux of photons from the blast, which releases 70-80% of the bomb's energy. The effects go up to third degree thermal burns and are not a pretty sight. Initial deaths are due to this effect.

The next phenomenon is the supersonic blast front. You see it before you hear it. The pressure front has the effect of blowing away anything in its path.

After the front comes the overpressure phase. It would feel like being underwater a few hundred meters. (At a few thousand meters under the sea, pressurized hulls implode.) The pressure gradually dies off, and there is a negative overpressure phase, with a reversed blast wind. This reversal is due to air rushing back to fill the void left by the explosion.

The air gradually returns to normal atmospheric pressure. At this stage, fires caused by electrical destruction and ignited debris turn the place into a firestorm.

Then come the middle term effects such as keloid formation and retinal blastoma. Genetic or hereditary damage can appear up to forty years after initial irradiation.

ATMOSPHERIC EFFECTS OF BLASTS

The Mushroom Cloud. The heat from fusion and fission instantaneously raises the surrounding air to 10 million degrees C. This superheated air plasma gives off so much light that it looks brighter than the sun, and is visible hundreds of kilometers (km) away. The resultant fireball quickly expands. It is made up of hot air, and hence rises at a rate of a few hundred meters per second. After a minute or so, the fireball has risen to a few kilometers, and has cooled off to the extent that it no longer radiates.

The surrounding cooler air exerts some drag on this rising air, which slows down the outer edges of the cloud. The unimpeded inner portion rises a bit quicker than the outer edges. A vacuum effect occurs when the outer portion occupies the vacuum left by the higher inner portion. The result is a smoke ring.

The inner material gradually expands out into a mushroom cloud, due to convection. If the explosion is on the ground, dirt and radioactive debris get sucked up the stem, which sits below the fireball.

Collisions and ionization of the cloud particles result in lightning bolts flickering to the ground.

Initially, the cloud is orange-red due to a chemical reaction when the air is heated. When the cloud cools to air temperature, the water vapor starts to condense. The cloud turns from red to white.

In the final stages, the cloud can get about 100km across and 40km high, for a megaton class explosion.



If you see the flash, duck and cover!

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Electromagnetic Pulse (EMP). A nuclear explosion gives off radiation at all wavelengths of light. Some is in the radio/radar portion of the spectrum - the EMP effect. The EMP effect increases the higher you go into the atmosphere. High altitude explosions can knock out electronics by inducing a current surge in closed circuit metallic objects - electronics, power lines, phone lines, TVs, radios, etc. The damage range can be over 1000km.

OVERVIEW OF IMMEDIATE EFFECTS

The three categories of immediate effects are: blast, thermal radiation (heat), and prompt ionizing or nuclear radiation. Their relative importance varies with the yield of the bomb. At low yields, all three can be significant sources of injury. With an explosive yield of about 2.5 kilotons (kT), the three effects are roughly equal. All are capable of inflicting fatal injuries at a range of 1km.

The fraction of a bomb's yield emitted as thermal radiation, blast, and ionizing radiation is essentially constant for all yields, but the way the different forms of energy interact with air and target vary dramatically.

Air is essentially transparent to thermal radiation. The thermal radiation affects exposed surfaces, producing damage by rapid heating. A bomb that is 100 times larger can produce equal thermal radiation intensities over areas 100 times larger. The area of an (imaginary) sphere centered on the explosion increases with the square of the radius. Thus the destructive radius increases with the square root of the yield (this is the familiar inverse square law of electromagnetic radiation). Actually the rate of increase is somewhat less, partly due to the fact that larger bombs emit heat more slowly which reduces the damage produced by each calorie of heat. It is important to note that the area subjected to damage by thermal radiation increases almost linearly with yield.

Blast effect is a volume effect. The blast wave deposits energy in the material it passes through, including air. When the blast wave passes through solid material, the energy left behind causes damage. When it passes through air it simply grows weaker. The more matter the energy travels through, the smaller the effect. The amount of matter increases with the volume of the imaginary sphere centered on the explosion. Blast effects thus scale with the inverse cube law which relates radius to volume.

The intensity of nuclear radiation decreases with the inverse square law like thermal radiation. However nuclear radiation is also

strongly absorbed by the air it travels through, which causes the intensity to drop off much more rapidly.

These scaling laws show that the effects of thermal radiation grow rapidly with yield (relative to blast), while those of radiation rapidly decline.

In a small nuclear attack (bomb yield approx. 15kT) casualties (including fatalities) would be seen from all three causes. Burns (including those caused by an ensuing fire storm) would be the most prevalent serious injury (two thirds of those who would die the first day would be burn victims), and occur at the greatest range. Blast and burn injuries would be found in 60-70% of all survivors. People close enough to suffer significant radiation illness would be well inside the lethal effects radius for blast and flash burns, as a result only 30% of injured survivors would show radiation illness. Many of those people would be sheltered from burns and blast and thus escape the main effects. Even so, most victims with radiation illness would also have blast injuries or burns as well.

With yields in the range of hundreds of kilotons or greater (typical for strategic warheads) immediate radiation injury becomes insignificant. Dangerous radiation levels only exist so close to the explosion that surviving the blast is impossible. On the other hand, fatal burns can be inflicted well beyond the range of substantial blast damage. A 20 megaton bomb can cause potentially fatal third degree burns at a range of 40km, where the blast can do little more than break windows and cause superficial cuts.

A convenient rule of thumb for estimating the short-term fatalities from all causes due to a nuclear attack is to count everyone inside the 5 psi blast overpressure contour around the hypocenter as a fatality. In reality, substantial numbers of people inside the contour will survive and substantial numbers outside the contour will die, but the assumption is that these two groups will be roughly equal in size and balance out. This completely ignores any possible fallout effects.

OVERVIEW OF DELAYED EFFECTS

Radioactive Contamination. The chief delayed effect is the creation of huge amounts of radioactive material with long lifetimes (half-lives ranging from days to millennia). The primary source of these products is the debris left from fission reactions. A potentially significant secondary source is neutron capture by non-radioactive isotopes both within the bomb and in the outside environment.

When atoms fission they can split in some 40 different ways, producing a mix of about 80 different isotopes. These isotopes vary widely in stability; some are completely stable while others undergo radioactive decay with half-lives of fractions of a second. The decaying isotopes may themselves form stable or unstable daughter isotopes. The mixture thus quickly becomes even more complex, some 300 different isotopes of 36 elements have been identified in fission products.

Short-lived isotopes release their decay energy rapidly, creating intense radiation fields that also decline quickly. Long-lived isotopes release energy over long periods of time, creating radiation that is much less intense but more persistent. Fission products thus initially have a very high level of radiation that declines quickly, but as the intensity of radiation drops, so does the rate of decline.

A useful rule-of-thumb is the "rule of sevens". This rule states that for every seven-fold increase in time following a fission detonation (starting at or after 1 hour), the radiation intensity decreases by a factor of 10. Thus after 7 hours, the residual fission radioactivity declines 90%, to one-tenth its level of 1 hour. After 7*7 hours (49 hours, approx. 2 days), the level drops again by 90%. After 7*2 days (2 weeks) it drops a further 90%; and so on for 14 weeks. The rule is accurate to 25% for the first two weeks, and is accurate to a factor of two for the first six months. After 6 months, the rate of decline becomes much more rapid. The rule of sevens corresponds to an approximate $t^{-1.2}$ scaling relationship.

These radioactive products are most hazardous when they settle to the ground as "fallout". The rate at which fallout settles depends very strongly on the altitude at which the explosion occurs, and to a lesser extent on the size of the explosion.

If the explosion is a true air-burst (the fireball does not touch the ground), when the vaporized radioactive products cool enough to condense and solidify, they will do so to form microscopic particles. These particles are mostly lifted high into the atmosphere by the rising fireball, although significant amounts are deposited in the lower atmosphere by mixing that occurs due to convective circulation within the fireball. The larger the explosion, the higher and faster the fallout is lofted, and the smaller the proportion that is deposited in the lower atmosphere. For explosions with yields of 100kT or less, the fireball does not rise above the troposphere

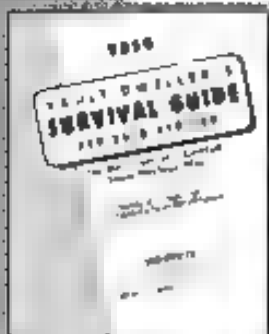
where precipitation occurs. All of this fallout will thus be brought to the ground by weather processes within months at most (usually much faster). In the megaton range, the fireball rises so high that it enters the stratosphere. The stratosphere is dry, and no weather processes exist there to bring fallout down quickly. Small fallout particles will descend over a period of months or years. Such long-delayed fallout has lost most of its hazard by the time it comes down, and will be distributed on a global scale. As yields increase above 100kT, progressively more and more of the total fallout is injected into the stratosphere.

An explosion closer to the ground, close enough for the fireball to touch, sucks large amounts of dirt into the fireball. The dirt usually does not vaporize, and if it does, there is so much of it that it forms large particles. The radioactive isotopes are deposited on soil particles, which can fall quickly to earth. Fallout is deposited over a time span of minutes to days, creating downwind contamination both nearby and thousands of kilometers away. The most intense radiation is created by nearby fallout because it is more densely deposited, and because short-lived isotopes haven't decayed yet. Weather conditions can affect this considerably, of course. In particular, rainfall can rain out fallout to create very intense localized concentrations. Both external exposure to penetrating radiation, and internal exposure (ingestion of radioactive material) pose serious health risks.

Explosions close to the ground that do not touch it can still generate substantial hazards immediately below the burst point by neutron activation. Neutrons absorbed by the soil can generate considerable radiation for several hours.

The megaton class weapons have been largely retired, being replaced with much smaller yield warheads. The yield of a modern strategic warhead is, with few exceptions, now typically in the range of 200-750 kT. Recent work with sophisticated climate models has shown that this reduction in yield results in a much larger proportion of the fallout being deposited in the lower atmosphere, and a much faster and more intense deposition of fallout than had been assumed in studies made during the sixties and seventies. The reduction in aggregate strategic arsenal yield that occurred when high yield weapons were retired in favor of more numerous lower yield weapons has actually increased the fallout risk.

ADDITIONAL PUBLICATIONS

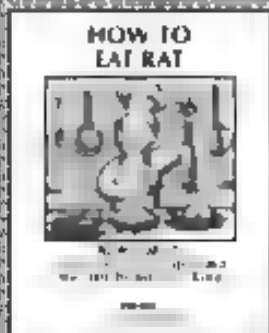
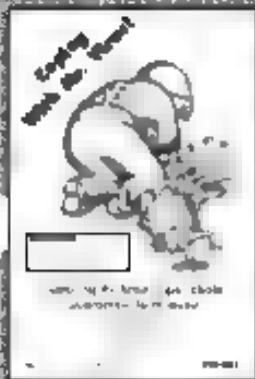


YDSG (abridged version)

A condensed version of the YDSG containing just the important information you need!

Coping With Mr. Virus

An extended pamphlet for the whole family! Includes the popular How-To-Burr Omeared Babies section.

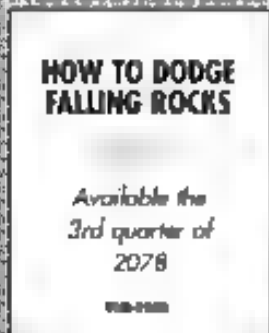
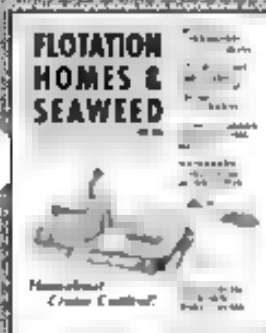


How to Eat Rat

Over 101 recipes from basic meals to a complete set of dishes, all the way from snacks to desserts.

Flotation Homes and Seaweed

A complete survival guide for the ocean bound. More tips, instructions, and plans than you could possibly ever use.



Coming Soon!



Section II. SIMULATION

2

SIMTEX OPERATIONS

The Vault-Tec Research Group has determined that after a long period of security, many Vault-Dwellers will feel "uncomfortable" with the idea of returning to the outside world. The SimTek 5000 will provide a safe and reassuring return to life on the outside world. This chapter will give you a brief walk-through of the operation of the SimTek 5000.

Experienced Vault Dwellers may want to start with Character Creation, and skip this tutorial chapter. For beginning Vault Dwellers, this tutorial will prepare you for the outside world.

After starting the Fallout process on your terminal, click on the **NEW GAME** button from the Main Menu.

The character selection screen will appear. For now, keep the personnel record of Max Stone displayed and select **TAKE**. This will choose Max as your character. In the future, you may want to select another character or even create your own character.

The simulation will now start. After a briefing by the Vault Overseer as to your immediate task, you will appear outside the Vault Blast Door.



Figure 2.1
Starting out
right outside the
Vault Door. Click
the INV button to
open your
inventory and
equip yourself.

Your first action should be to equip yourself with armament. All Vault-Tec prepared Vaults come with the latest in offensive and defensive equipment. You will be supplied with the most lethal self-protective devices available.

Click the **INV** button on the interface bar at the bottom of the screen. The hand cursor allows you to move items around in your

inventory. Click and drag the pistol to the ITEM 1 slot. Release the mouse button. You are now armed! Move the brass knuckles to the ITEM 2 slot. Click on the DONE button. You will return to the main game view.

The hex cursor is a movement cursor. Move it to where you want to walk, and left-click to start walking there. For now, move your mouse until the movement cursor is adjacent to the computer next to the door. Left-click once to walk there. As you are walking, you can move the movement cursor to another location. If you want to interrupt your current walk, simply left-click again.

Once you are standing next to the computer, right-click once. This will change the cursor from the movement cursor to the command cursor. The command cursor is how you interact with items/objects in the environment and other people. Right-click once on the computer. This will make your character "use" the computer. Now look at the display window in the lower left hand corner of the screen. Try using the computer again.

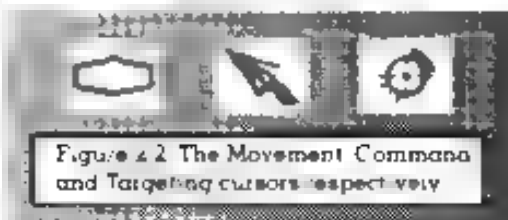


Figure 2-2 The Movement Command and Targeting cursors, respectively



Figure 2-3 Using the Vault door computer

Left-click on your character a couple of times. Notice that it rotates you around. Your facing generally does not matter as your character will turn to face whatever direction is important when needed. For now, right-click again to change the cursor back to the movement cursor. Walk to the right side of the large vault door.

Now change to the command cursor. Left-click on the computer. If you are standing too far away from an object, you will automatically walk or run there when you attempt to use the object.

Walk south, moving further into the cave. Watch out for vermin!

If you move too close to a rat, it will decide to attack you. After it moves up to you and bites, combat will start. Notice that the combat buttons in the lower right hand corner of the interface bar open up. It's now combat! Left-click on the pistol. The cursor will change to a target and the rat will be outlined in red. Move the target cursor over the rat. The number next to the cursor is how likely you are to hit it. It should be a pretty big number. Left-click the mouse button to shoot the rat. The closer you are to your target, the easier it is to hit them with a ranged weapon.

If you miss it, or it takes the bullet but doesn't die, click on the big red button that is attached to the button with the pistol. It should change the active item from the pistol to the brass knuckles. Left-click on the brass knuckles to attack with them. Target the rat again. You can continue to attack until you run out of action points. The number of action points you have remaining is displayed by the row of green lights above your weapon. The cost to use a weapon is displayed in the lower left-hand side of the weapon button. When you have just a few action points remaining, end your turn by clicking on the END TURN button. Everyone else involved in the combat will get a chance to act, and then it will be your turn again. When your turn starts, your action points are restored.



Figure 2-4: The combat button. The END TURN button will end your current turn. The END COMBAT button will attempt to stop the combat. If there are hostile creatures still involved, the fight will continue!

If the rat dies, combat will end. If the rat lives after your attacks, it will get another chance to attack you. You know it is the rat's turn when the lights on the interface bar turn from green to red. Don't worry, you'll get a turn soon enough. If the rat starts to

run away, you can end combat by clicking on the END COMBAT button.

Once the rat is dead, continue south through the caverns. Hold down the shift key and click on a hex to run instead of walking.

If you encounter rats, use a variety of weapons to attack them. You will notice that some weapons are easier or better to use. Due to the darkness of the caves, it is difficult to hit creatures at a distance. To increase the amount of light and make it easier to see the rats, you might want to use one of your flares. Open inventory right-click to change from the hand cursor to the inventory command cursor. Left-click and hold on the flare. A list of options will appear. From the top, the list of icons are: Examine, Use, Drop, and Cancel. Move the mouse down to the Use action icon. Release the mouse button. The flare has now been activated. To keep it separate from the un-activated flare, it is moved to the bottom of your inventory list. Scroll down to the bottom of the list. Left-click and hold on the activated flare. Select the drop action icon. The lit flare will be dropped to the ground. Any attacks within the zone of light are easier than in the pure darkness of the cave. Experiment.

You might get hurt. If so, you need to heal yourself. Open your inventory and use a Stimpak. Stimpaks will heal your current hit points, but never over your maximum hit points. Another method of healing is to rest. Press Z on the keyboard. This will display the PIPBoy clock. Click on the Until Healed line in the display. You will spend time resting until all of your hit points are restored. Another way to access the clock is to click on the PIP button on the interface, and then click on the alarm clock icon in the upper left-hand corner of the PIPBoy. There are usually a couple of different ways of performing the major functions in the game.

When you get into another combat, select the pistol. Right-click once on the button. This will display the targeted attack symbol in the lower right hand corner of the weapon button. When you make attacks now, you will make a targeted attack. This will let you attack specific locations on your target. Clicking on a target with the target cursor will display a new window. Select the location you want to attack by clicking on the name of the location.

Some areas of a rat are harder to hit. However, the chance of you doing more damage or some other effect is increased by making a targeted attack.

When you are tired of killing rats, you can try Sneaking past them. A good sneak will let you avoid the rats. Press the Skindex button on the interface bar. Click on the Sneak skill. You will see Sneak printed just above the interface bar. As long as you are Sneaking, the rats will have a more difficult time of seeing you. If the rat does see you, they will start combat as usual. There is no combat penalty for trying to Sneak and getting caught at it.

Do not run. If you run, you cannot Sneak anymore. Sneak carefully around the rats.

There are other skills on the Skindex that can be used. The First Aid and Doctor skills allow you to heal yourself and other characters in the game. All the skills except Sneak require that you give a target to use the skill on. If you are hurt, open the Skindex and select First Aid. The targeting cursor will turn yellow. Click on your character. Depending on how good of a medic you are, the better your First Aid skill, the better you are at performing that skill, you will heal some hit point damage or do nothing.

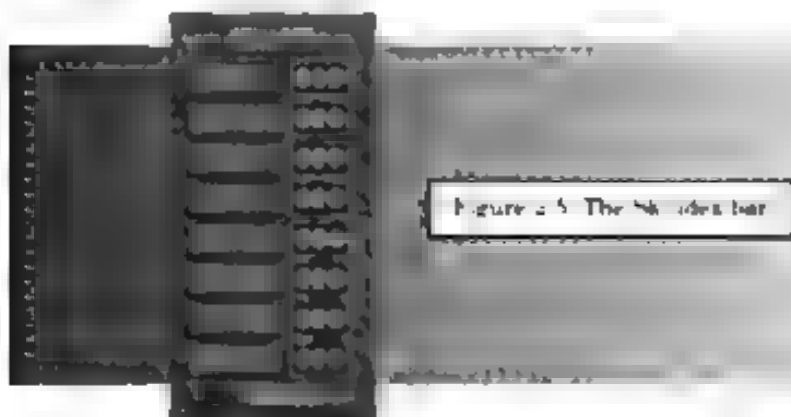


Figure 2-5 The Skindex bar

When you have explored enough of these caverns, go to the south and then to the west. The Automap, which can be accessed by clicking the MAP button or pressing the TAB key, will show your location in the caves. You are looking for a long tunnel in the southwest corner of the caverns.

When you reach the edge of the tunnel, you will see natural

light. Walk into the light. This will take you to the world map. The world map is how you get around the vast outdoors. Click on the Vault-15 button on the right-hand side of the screen. This will start walking you to your first destination.

Figure 2-6:
Exiting the
Vault caverns.
The patch of
darkness in the
light is the "exit
grid." Walk into
the exit grid to
leave the map.



The world is dark to start. As you explore, areas will be revealed. A green circle on the world map denotes an important area. Vault-13 has a green circle since it is so important. You should stop and explore any other important areas that you come across. Be careful exploring. If you spend too much time looking for new areas, you could find that the Vault has run out of water. Since your mission is to save the Vault from this terrible end, you should do everything you can do to avoid it.

Good luck!

Section III.
VAULT PERSONNEL

3

GENERAL

The key to a successful reintroduction of civilization following a massive scale nuclear war is people. Here at Vault-Tec, we are working to ensure that your fellow man (and woman), is up to the task of bringing America back from the dead.

Characters are people in the game world. A player character represents you in the game world. We will sometimes refer to a player character as personnel. The terms personnel and player character are interchangeable. Other types of characters are called non-player characters (NPCs), so that you won't confuse them with you. NPCs can be other vault dwellers, people from the outside world, or even mutants.

STANDARD PERSONNEL RECORDS

Fallout comes equipped with three pre-made characters for your use and enjoyment. These personnel are prepared for most conditions in the outside world.

3

MAX	
	<p>"Stone" to his friends. Maxwell is the largest person currently living in the Vault. He is known for his physical strength and stamina. He would make the ideal volunteer due to his tremendous size and strength. It is unfortunate that his intelligence was affected after birth when the labor bot dropped him on his head. He doesn't care that he might have to leave the Vault.</p>
<p>Figure 3-1 Max Stone VID 208-197 88-125</p>	

- NATALIA -



Figure 3-2: Natalia
Dubrovsky
VID 208-206-49-229

Natalia is the grand-child of a Russian diplomat who worked at the Soviet Consulate in Los Angeles. She is a talented acrobat with excellent coordination and reflexes. She is extremely intelligent and resourceful. Her only difficulty as a young child was understanding personal property laws. Natalia is very interested in leaving the Vault, and curious to explore the outside world.

- ALBERT -



Figure 3-3: Albert Cole
VID 208-206-49-227

Albert is a charismatic leader of a small vocal minority of the Vault population that is considering life on the outside world. Dedicated to the role of a negotiator, he is often able to communicate efficiently between different parties. His professed occupation is closest to what was once known as a "lawyer." Albert is often able to convince others that his ideas are correct.

We appreciate the fact that you are reading the Vault Dwellers Survival Guide, but would prefer that you use the Fallout interface, so we have implemented a special way of viewing these personnel.

From the character selection screen, select MODIFY. You can now examine these characters in detail, actually changing their statistics. But more importantly, you can view every item in their personnel record using the enclosed information card in the lower right-hand corner.

CREATING A NEW PERSONNEL RECORD

For maximum enjoyment, a character creation system has been implemented. This will allow you to make a character of your own choice. The following instructions will guide you through the character creation process.

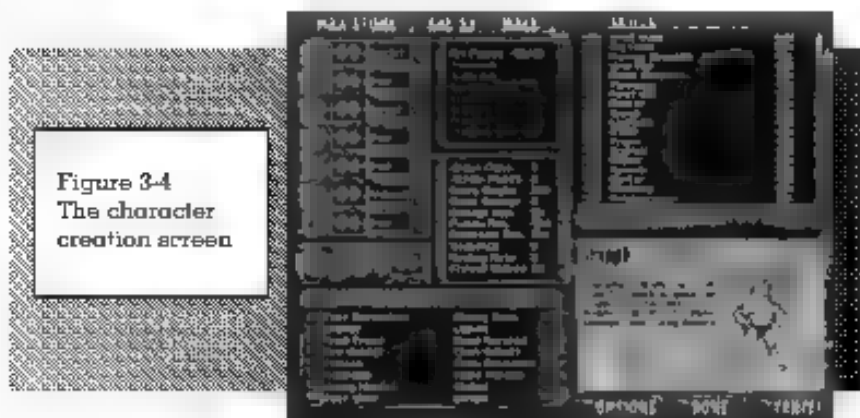


Figure 3-4
The character
creation screen

Your character is a representative of you in the game world. Your character will follow your commands, and perform actions as you require. It is up to you to make the character that best suits you and suits your style of play. Fortunately, with the Fallout Survival Kit, your happiness is assured. Vault-Tec guarantees it!

We will often refer to you and your character as the same person. That is the beauty of a role-playing game - you are your character. Your actions as the player will control the actions and consequences of the little character on the screen. Obviously, we don't condone some of the actions performed in the game world as appropriate or even legal, actions in the real world. Don't confuse the two.

Characters are defined by various statistics and skills. During the character creation stage, you will adjust the primary statistics, and in turn, the statistics will determine your skills.

If you want to see what a particular statistic or skill does, click on the item name with your mouse pointer, and the card in the lower right-hand corner of the screen will display the pertinent information.

*Guarantee not available in all states, or after any of the following: flooding, drought, famine, nuclear war, or other acts of God.



Figure 3-5 The information on this card will help answer any questions you may have. It's an important resource that you should pay attention to.

To make your own character, do the following

- (1) Spend Character Points on Statistics
see page 3—5
- (2) Select three Tag Skills
see page 3—10
- (3) Choose up to two Traits
see page 3—14,
- (4) Select your Age
see page 3—17)
- (5) Select your Sex
see page 3—17)
- (6) Name your character
see page 3—17)
- (7) *Optional* If necessary, select any Options
see page 3—18,
- (8) Congratulations! Your character is finished, press DONE to continue!



Always test the air for radiologicals and viruses. A containment suit is your best friend!

STEP #1: SPEND CHARACTER POINTS ON STATISTICS

All characters have seven primary statistics.

Strength. Raw physical strength. The ability to lift weights, have stronger punches, carry more equipment and use larger weapons. Stronger characters will be able to lug around more items, do more damage in combat and so on. If you want to play a big, physical character, choose a high Strength.

Perception. The ability to notice things. A combination of your senses including touch, sight, taste, smell and hearing. Perception affects your ranged weapon distances, small details that you have a chance to notice and other sense related tasks. Perceptive characters will get more information about the world. If want to play a character that can shoot guns at targets really far away, buy up your Perception.

Endurance. The ability to withstand punishment and physical exertion. A high Endurance will let you survive and carry on where other weaker people would have to stop. It affects your hit points and your resistances. A character with a high Endurance will be able to fight longer, and be less likely to die in combat.

Charisma. A combination of looks and charm. The higher your Charisma, the better you are able to communicate with other people. Highly Charismatic characters are more likely to be able to get their way without resorting to violence, and to be able to get better deals in trading. Characters who like to talk to people should buy up their Charisma.

Intelligence. Your mental strength and abilities. The higher your Intelligence, the more skills you will excel in, and the more options you will have in dialogue. A high Intelligence is important to any character. Characters who want lots of choices in dialogue should pick a higher Intelligence statistic.

Agility. Your speed and dexterity. Physical manipulation ability. Your Agility will affect many skills requiring fine coordination. It will also adjust many combat related statistics. Agility is important to any type of character. Combat and thief characters should have a higher Agility than diplomatic or scientific characters.

Luck. Luck is the odd statistic. It is a combination of fate, karma and, in general, how the universe views you. Luck will modify many things. All characters will benefit from a high Luck, and will suffer a little more with a lower Luck.

3

All primary statistics have a value. The values range from one, the lowest, to ten, the highest, and five is average. All characters start with average values in all statistics. Fortunately, you get five character points to spend on your statistics to improve them. You can spend one character point on any five statistics, put all character points into one statistic, or any combination you wish.

Figure 3-6
The location of
the primary
statistics on the
character
screen.



To help you gauge the value of a statistic we devised a simple system of naming each value. Here is the list from worst to best:

- | | |
|-------------|--------------|
| 1) Very Bad | 6) Good |
| 2) Bad | 7) Very Good |
| 3) Poor | 8) Great |
| 4) Fair | 9) Excellent |
| 5) Average | 10) Heroic |

Hope that helps
overseer

If you want more character points, you can reduce a statistic below five, gaining one character point for every point you lower the statistic. No statistic can drop below one. You can lower any statistic, or combination of statistics. Your friends at Vault-Tec do not suggest lowering any statistic below four, but the option is there for you. If you lower your Intelligence below four, for example, your dialogue will be severely restricted (see page 4-29).

You must, however, spend all of your character points before you complete your character.

When you change your primary statistics notice that your derived statistics and skills change. The derived statistics and skills are based, in part, on the values of the primary statistics. You cannot adjust them directly; see Tag Skills, page 3--10. If you want more Hit Points, you will have to spend more character points on Endurance.

Your statistics define you. If you have a high Strength, high Agility, low Intelligence and low Charisma, you are most likely not going to impress someone with your savior-faire at a dance, but that table you're about to drop on their head will get their attention.

Your statistics will generally not improve directly through experience or game play. You should plan on seeing the same statistics throughout the course of your adventures, and plan accordingly.

Derived Statistics

In order to make the best possible decision regarding your character choice, we have developed an easy to use method of determining your derived statistics. We call this method the "look-it-up-below" method. And we think it works pretty darn well.

Hit Points. Your hit points determine how much damage you can take before you succumb to the long dirt nap. The more hit points you have, the longer you can survive outside. The less hit points you have, the more healing you will need to do. The number of hit points you have will grow when your character earns experience and advances in levels. The number of hit points are displayed as current/maximum. If you ever get to 1/30 hit points, for example, you need some serious medical attention. And soon, brother.

Starting hit points are equal to $15 + 2 \times \text{Endurance} + \text{Strength}$. Average characters will have 30 hit points.

Armor Class. Your natural armor class is how good you are at avoiding being hit in combat. The higher your armor class statistic, the worse your opponents' to hit number. Your natural armor class may be augmented and improved by wearing armor. See Armor (page 5--12) and the sample armors in the Equipment List, page 5--15, for more information about armor and armor class.

Starting armor class is equal to your Agility. Average characters will have an armor class of 5.

Action Points. The number of action points your character has will determine how many different actions you can take during a combat turn. Every action will have a different action point cost, which is subtracted from your total action points. When you run out of action

points, you cannot perform another maneuver until the next combat turn. Action points are only used during combat. Action points are not cumulative, but instead roll into armor class on a 1 for 1 basis. If you have 4 action points remaining when you end your combat turn, you will get a +4 bonus to your armor class until the start of your next turn. See Actions in Combat (page 5-2) for more details on action points.

Initial Level Starting action points are equal to $\frac{1}{2}$ Agility + 5. Average characters will have 7 action points.

Carry Weight. The total amount of equipment that you can lug around the post-nuclear world is represented by your carry weight. The higher your carry weight the more equipment you can carry. You can carry a total amount of equipment in pounds equal to your carry weight, and no more.

Initial Level Starting carry weight is equal to 25 lbs. + (your Strength \times 25 lbs.). Average characters will have 150 lbs.

Melee Damage. Your melee damage is the amount of bonus, or extra, damage you do with unarmed and hand-to-hand weapon damage in combat. Using your fists, a knife, or a sledgehammer in combat would do the basic amount of damage for those weapons plus your melee damage. If you want to do more melee damage, take a higher Strength.

Initial Level Starting melee damage is equal to Strength - 5, with a minimum of 1 point. Average characters will have a melee damage of 1.

Damage Resistance. The ability to shrug off some amount of damage in combat is attributed to your damage resistance derived stat. This statistic is a percentage meaning that it will subtract an amount of damage from every blow based on a percentage of the damage. If your damage resistance is 10%, and you take 20 points of damage from a single attack, you will end up taking 18 points of damage after your damage resistance. You will need to equip armor to see your damage resistance increase.

Initial Level Starting damage resistance is equal to 0%.

Poison Resistance. Getting poisoned is an unfortunate possibility that must be taken into account. Fortunately, most people have a hardy poison resistance compared to the small animals that are the usual prey for most poisonous snakes. Poison resistance is a percentage that will reduce the amount of poison damage you take.

Initial Level Starting poison resistance is equal to Endurance \times 5. Average characters will have 25% poison resistance.

Radiation Resistance. Radiation is something that any vault-dweller must be concerned with. While it is normal for a small amount of roentgens, or rads, to enter the normal person during the normal year of activity, more if activities include mountain expeditions and/or high altitude ballooning, a large amount of rad poisoning is a reason for concern. The average person receives about $\frac{1}{2}$ to 1 rad a year. After a nuclear fallout, you would expect more. See Damage page 5—12) for more information. With any exposure to radiation, your radiation resistance will reduce the total amount of rads you take by it's percentage. It is very similar to damage or poison resistance.

Initial Level Starting radiation resistance is equal to your Endurance $\times 2$. Average characters will have a 10% radiation resistance.

Sequence. This statistic will help determine who will go first in combat, and in which order people and critters will get to act. See Combat page 5—2) for more information. The higher the sequence value, the more likely you will act before your opponent.

Initial Level Starting sequence is equal to your Perception $\times 2$. Average characters will have a 10 sequence.

Healing Rate. People do not heal wounds at the same rate over the same amount of time. Your healing rate will tell you how fast you can bounce back from that near-fatal encounter and continue with your important work of holding off the end of the world. If you have taken damage, you will get a number of hit points back at the end of each day equal to your healing rate. If you rest, you will get a number of hit points back every six hours equal to your healing rate. In no case can you get more current hit points than your maximum number of hit points.

Initial Level Starting healing rate is equal to $\frac{1}{4}$ Endurance with a minimum of 1. Average characters will have a healing rate of 1.

Critical Chance. Critical hits in combat are special attacks that cause extra damage or some special effect. The chance to cause a critical hit is partially based on this stat. The higher your critical chance, the more likely you are to cause one of these powerful hits. It is expressed in a percentage, adding directly as a bonus to the chance to cause a critical hit.

Initial Level Starting critical chance is equal to your Luck. Average characters will have a +5% critical chance.

WHAT ARE TAG SKILLS AND HOW DO THEY WORK?

Skills are learned abilities. As you gain experience, your skills will improve unlike your basic statistics. All skills have a skill level, expressed as a percentage. The higher the skill level, the more likely you are to succeed at using that skill.

Tag Skills define what skills you are especially good at. They are your specializations, if you will. Every new vault-dweller must select three Tag Skills to specialize in. You cannot leave the character editor without selecting all three.

You will get an immediate +20% in all three of your Tag Skills, but even more importantly, they will grow faster from experience than a normal skill. You will get twice the improvement when you spend skill points in them (see Experience, page 5—21).

Click on the skill name to display the information card.

Click on the small button to the left of the skill name to Tag that skill. If you wish to deselect a Tag Skill, simply click the button again. Tag skills are highlighted in a different color to remind you of their status.

Some skills are automatically used when you do something. Other skills require that you actively use them. Those skills can be used from the Skilldex (see page 4—16).

To help you choose your Tag Skills, we now present the complete skill list.

Complete Skill List

Small Guns, Big Guns, Energy Weapons, Unarmed, Melee Weapons, and Throwing are all combat skills. They govern the use of weapons and attacks in combat. They are also used automatically when you attack an opponent.

Small Guns. This skill covers the use of pistols, sub-machine guns, rifles and shotguns. The higher your Small Guns skill, the easier it will be for you to hit your target, and the longer effective range you will have in combat.

Initial Level Starting Small Guns skill is equal to $35\% + 1\% \times \text{Agility}$. Average characters will have a 40%.

Big Guns. This is the skill of flamers, miniguns, rocket launchers and other large support weapons. If it's a large weapon, you can count on Big Guns being the skill rolled against. Like Small

Guns, the better your skill, the easier it will be to hit your target, and the longer range you can really hit people at

Initial Level Starting Big Guns skill is equal to $10\% + 1\% \times \text{Agility}$. Average characters will have a 15% skill.

Energy Weapons. The use of energy weapons is not a very common skill in the Vault. Energy weapons had just started to come into actual use in warfare when the world blew up. Lasers and Plasma weapons are covered by the Energy Weapons skill. Basically, if it uses an energy cell or power pack, and not cartridge ammunition, it falls under this skill.

Initial Level Starting Energy Weapons skill is equal to $10\% + (1\% \times \text{Agility})$. Average characters will have a 15% skill.

Unarmed. This is the skill of beating people up with your fists and feet. The better you are at this skill, the more likely you are going to hit them in combat. At very high skill levels, you can succeed at those targeted shots easier, inflicting terrible damage. Everyone starts with a pretty good Unarmed skill, since the basic concept is pretty simple.

Initial Level Starting Unarmed skill is equal to $40\% + 1\% \times$ the average of your Agility and Strength. Average characters will have a 45% in Unarmed combat.

Speech.* This is the skill of dialogue. The better your Speech skill, the more likely you will be able to get your way when talking to people. When there is a chance that the NPC might take your word, believe your lie, or just follow your word, this is the skill that is used. Automatic use.

Initial Level Starting Speech skill is equal to $25\% + 2\% \times \text{Charisma}$. Average characters will have a 35% skill.

Barter.* The skill of trading. In the post-nuclear world, currency is not used commonly. Barter will allow you to get more for less when trading equipment, weapons and other items. A high Barter skill will lower the prices you pay for items you purchase and increase the money you get for selling excess equipment. A good Barter skill isn't important if you're killing everyone, but it certainly is a valuable skill for the non-berserkers out there. Automatic use.

Initial Level Starting Barter skill is equal to $20\% + (2\% \times \text{Charisma})$. Average characters will have a 30% skill.

*NOTE Speech and Barter are the domain of the diplomatic character.

Gambling. The skill of Gambling lets you play games of chance, and win more often. As compared to playing games of chance, and losing more often. When the world comes to an end, and all that is left is a can of soup, some dweeb will bet it on a cockroach race. Automatic use.

Initial Level Starting Gambling skill is equal to $20\% + (3\% \times \text{Luck})$. Average characters will have a 35% skill.

Outdoorsman. This is the skill of outdoor living, and survival in a hostile environment. Not many people from the Vault are skilled in Outdoorsman. Automatic use.

Initial Level Starting Outdoorsman skill is equal to $5\% + 1\% \times$ the average of your Intelligence and Endurance. Average characters will have a 10% skill.

•WARNING•

The following four skills are not approved by Vault-Tec

Sneak. The skill of being able to move quietly and out of sight. When you are Sneaking, and doing it successfully, other people will be less likely to notice you - at a distance. If you get too close to a dangerous mutant, no matter how good you are at Sneaking, they will notice you. Active use. Use Sneak to toggle it on and off. You automatically stop Sneaking when you run. While Sneaking, you will see this:



In the display, just above the interface bar. This doesn't tell you if you are Sneaking successfully. The reactions from hostile, or inquisitive creatures will tell you that. Your Sneak skill is rolled when you start to Sneak, and every minute after that.

Initial Level Starting Sneak skill is equal to $25\% + 1\% \times$ Agility. Average characters will have a 30% Sneak.

Lockpick. If you need to open locks without the proper key, then this is the skill for you. Having an actual lockpick will improve your chances, but it is not necessary. There are two types of locks in the Fallout world: primitive and electronic. Lockpicks work against primitive locks, and electronic lockpicks work on electronic locks. A particular lock may be more difficult to pick than other locks. Active use. Select a target to lockpick.

Initial Level Starting Lockpick skill is equal to $20\% + 1\% \times$ the average of your Perception and Agility. Average characters will have a 25% skill.

Steal. This is the art of removing things from a person or object, without being noticed. Even if you succeed, there is a chance that a critter might notice you. Larger objects are more difficult to steal than smaller objects. The more objects you attempt to steal, the more likely you are to be noticed. You cannot steal objects that a person has equipped. If you steal from a person, it might be a good idea to go behind them so they can't see you as easily. Active use. You will need to pick a target to steal from.

Initial Level Starting Steal skill is equal to $20\% + 1\% \times$ Agility. The average character will have a 25% Steal skill.

Traps. The skill of disarming bad things that will hurt you. Your Perception will find them for you. If you decide to set bad things for other people (like explosives), then this is the skill that is used to set them. A critical failure while setting an explosive will detonate it prematurely. Active use, but sometimes used automatically. You will need to pick a target to attempt the disarming.

Initial Level Starting Traps skill is equal to $20\% + 1\% \times$ the average of your Perception and Agility. Average characters will have a 25% skill.

First Aid.* The skill of minor healing. You will be able to cure minor wounds, cuts and bruises with this skill. You can only use it three times a day, and it takes a little while to work. Active use. Select a target to heal, but this is most likely going to be you!

Starting First Aid skill is equal to $30\% + 1\% \times$ the average of your Perception + Intelligence. Average characters will have a 35% skill.

Doctor.* A more advanced skill of healing. You can heal serious damage and crippled limbs but not poison or radiation damage. Using this skill will take a while to perform. Every crippled limb will add to the time required to use the Doctor skill. You can only use this skill three times a day, but you can combine it with First Aid. Active use. You need to pick a target to play Doctor with.

Initial Level Starting Doctor skill is equal to $15\% + 1\% \times$ the average of your Perception and Intelligence. Average characters will have a 20% skill.

*NOTE First Aid and Doctor are healing skills. They will be very useful to all sorts of personnel.

The last two skills are the scientific skills.

Science. The skill of knowledge and learning. It covers computers, electronics, mechanical, and other brain hurting tasks. Active use but sometimes used automatically. You will need to pick a target to scientize.

Initial Level Starting Science skill is equal to $25\% + (2\% \times \text{Intelligence})$. Average characters will have a 35% Science skill.

Repair. This is the physical use of Science. Repair will let you fix things, and in a world of broken stuff, this is a good thing. Active use. You will need to fix a target.

Initial Level Starting Repair skill is equal to $20\% + (1\% \times \text{Intelligence})$. Average characters will have a 25% skill.

STEP #3: CHOOSE UP TO TWO TRAITS

Traits are characteristics that better define who you are. They don't really fit into a single statistic or location, so we gave them their own area - Traits. All traits have a good impact and a bad impact. If you want the good effect of a trait, you must take the bad with it.

Fortunately, traits are optional. You do not have to take any traits, the choice is yours. If you do want to select traits, you can select up to two. You must do it during character creation, since you cannot select a trait once you start the game.

To select a trait, click on the small button next to the trait name. Selected traits will be highlighted. Click the button of a selected trait to deselect it.

Figure 3-7 The list of optional traits in the character editor.



Fast Metabolism. Your metabolic rate is twice normal. This means that you are much less resistant to radiation and poison, but your body heals faster +2 Healing Rate, but your radiation and poison resistances start at 0%.

Bruiser A little slower but a little bigger. You may not hit as often, but they will feel it when you do! Your total action points are lowered, but your ST is increased. Your Strength is +2, but you lose 2 action points.

Small Frame. You are not quite as big as the other vault-dwellers, but that never slowed you down. You can't carry as much, but you are more agile. You get a +1 bonus to your Agility, but your carry weight is equal to 15 lbs. x your Strength.

One Hander. One of your hands is very dominant. You excel with single-handed weapons, but two-handed weapons cause a problem. You are -40% to hit with two-handed weapons, and +20% to hit with weapons that only require one hand.

Finesse. Your attacks show a lot of finesse. You don't do as much damage, but you cause more critical hits. All of your attacks do -30% damage. Your critical chance is +10%.

Kamikaze. By not paying attention to any threats, you can act a lot faster in a turn. This lowers your armor class to just what you are wearing, but you sequence much faster in a combat turn. You have no natural armor class. You must wear armor to have an armor class. Your sequence gets a +5 bonus.

Heavy Handed. You swing harder, not better. Your attacks are very brutal, but lack finesse. You rarely cause a good critical hit, but you always do more melee damage. You do +4 points of damage

in melee combat (hand-to-hand or non-ranged weapons). Your critical hits have a -30% modifier to the critical hit tables.



Glowing objects are to be considered dangerous at all times. If an object has enough illuminosity to read at night, do not touch!

Fast Shot. You don't have time to aim for a targeted attack, because you attack faster than normal people. It costs you one less action point to use a weapon. You cannot perform targeted shots, but all weapons have AP -1 to use.

Bloody Mess. By some strange twist of fate people around you die violently. You always see the worst way a person can die. If the violence meter in the Preferences screen see page 4—35 is turned down, you will see the maximum level of violence for that setting of the meter.

Jinxed. The good thing is that everyone around you has more critical failures in combat, the bad thing is- so do you! If you or a non-player character have a failure during combat, there is a greater likelihood that the failure will be upgraded (or is it downgraded) to a critical failure. Critical failures are bad: weapons may explode, you may attack the wrong target, you could lose part of your turn, or any of a wide range of bad things.

Good Natured. You studied less-combative skills as you were growing up. Your combat skills start at a lower level, but First Aid, Doctor, Speech and Barter are substantially improved. These skills get a +20% bonus. You get a -10% modifier to starting combat skills (Small Guns, Big Guns, Energy Weapons, Unarmed, and Melee Weapons). This is a one-time bonus only.

Chem Reliant. You are more easily addicted to chems. Your chance to be addicted by chem use is twice normal, but you recover faster from their ill effects.

Chem Resistant. Chems only affect you half as long as normal, but your chance to be addicted is also only 50% of normal.

Night Person. As a night-time person, you are more awake when the sun goes down. Your Intelligence and Perception are improved at night, but dulled during the day. You get a -1 modifier to these two statistics from the hours of 0601 to 1800. You get a +1 modifier to these statistics from the hours of 1801 to 0600, or 6:00AM to 6:00PM, if you want to look at it that way.

Skilled. Since you spend more time improving your skills than a normal person, you gain more skill points. The tradeoff is that you do not gain as many extra abilities. You will gain a perk every four levels. You will get an additional 5 skill points per new experience level.

Gifted. You have more innate abilities than most, so you have not spent as much time honing your skills. Your statistics are better than the average person, but your skills are lacking. All stats have a +1 modifier. All skills are -10%. You receive 5 less skill points per level.

STEP #4: SELECT YOUR AGE

Not all people are the same. Their age will tell a lot about them. Your character's age will help you better define your character. Personae are ready to leave the vault at age 16, and will have lost that sparkle in their step by the age of 35. You can choose an inclusive age between 16 and 35.

Click on the AGE button to change from a bright youth, to an experienced elder. The left arrow will increase your age, while the right arrow will make you younger. Age will have no direct influence on your character during the character creation stage.

Age will have some small bearing on the game. It is mostly a player choice. There is no direct penalty or benefit for playing a younger or older character.

STEP #5: SELECT YOUR SEX

Your character like most people before him or her can be male or female. This will have some small bearing on the game, so choose carefully. It will not have a large bearing on the adventure, so don't think too much about it. Some non-player characters will react differently to you if you are a man or a woman.

Click on the MALE/FEMALE button to bring up a small window. Click on the symbol of the man if you want to be male, click on the woman if you want to be female.

Enjoy your decision, as you cannot change it once you start the game.

STEP #6: NAME YOUR CHARACTER

Click on the NAME button and type your character's name. Press ENTER when you are done, or click on the DONE button. If you want to change your name, this is the time to do it. If you don't, people will call you "None," the character with no name.

Your name should say something about your character. Bob is pretty boring. Vault-Tec apologizes to all vault-dwellers with the name of Bob for the use of that name in this example. Spike is better, especially if you like to use a lot of sharp melee weapons. Dr Atomic is perfect for the budding young scientist type characters.

Once you complete the first six steps, you will have successfully finished making your character. Unless you need to use one of the character editor options in step #7, you may skip to step #8, see below, and start the game.

STEP #7: CHARACTER EDITOR OPTIONS

To help you create or modify a personnel record, we have included the following options - at no extra charge! Select the **OPTIONS** button at the bottom of the character editor screen to access a special Options menu.

SAVE

If you want to save the status of your character during the creation process, select this option. A Save Character window will appear; enter a file name and press **ENTER**.

LOAD

To load a previously saved character, click **LOAD** and then select the character from the saved character list. This will overwrite the current character.

**PRINT TO FILE**

If you would like a hard copy of your character, select this function. It will ask for a file name, and then write a text version in the Fallout directory. If you print it to a file, the character is not automatically saved. There is no way for Fallout to restore a character from a text file version.

ERASE

If you are unhappy with the current character and want to start fresh, then select this option. You will have a chance to confirm this operation before the current character is trashed. You have been warned.

Figure 3-8: Character Editor Option screen.

STEP #8: FINISHING YOUR CHARACTER

As previously mentioned, click **DONE** on the character creation

Section IV INSTRUMENTATION

The purpose of this section is to provide information on the various instruments and equipment used in the field of instrumentation. The purpose of this section is to provide information on the various instruments and equipment used in the field of instrumentation.

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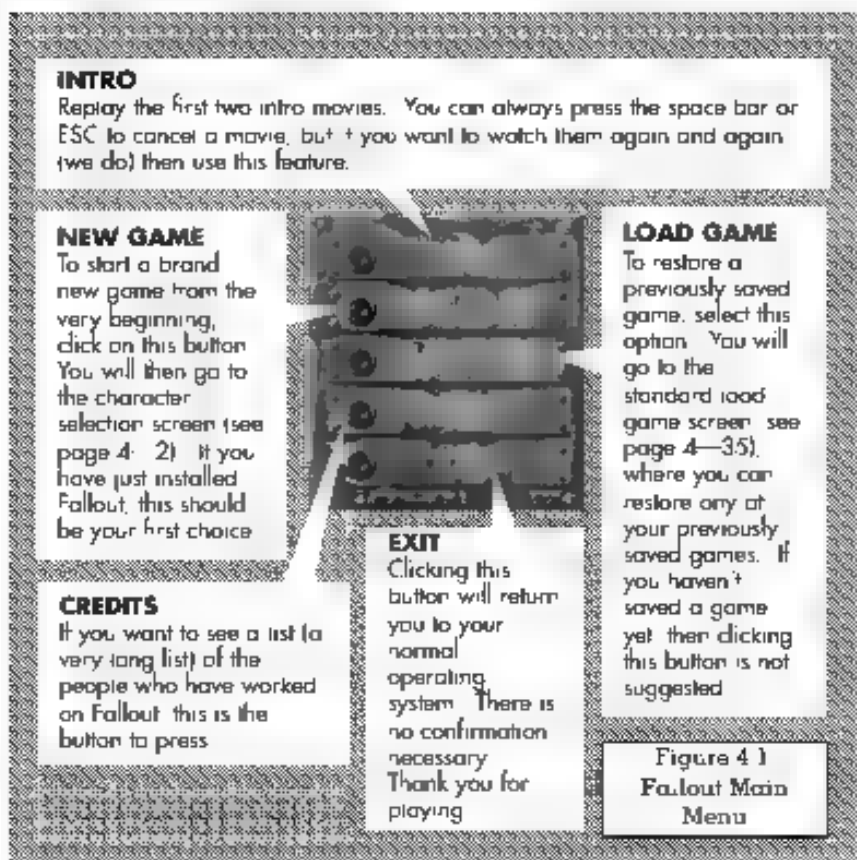
GENERAL

When you start Fallout, you can press the space bar or ESC to bypass any movie. You should not do this unless you have previously viewed the movie. Important information is contained within the movie segments.

The first thing you will see is the main menu.

MAIN MENU

The main menu is very simple. From here, you can start a new game, load a previously saved game, review the intro movie, see the credit list, or exit back to your normal operating system.



CHARACTER SELECTION SCREEN

When you select NEW GAME from the main menu, you will see this screen. You have your choice of TAKING or MODIFYING one of the three pre-made characters, or CREATING your own character from scratch.

If you press CANCEL, you will be returned to the main menu.

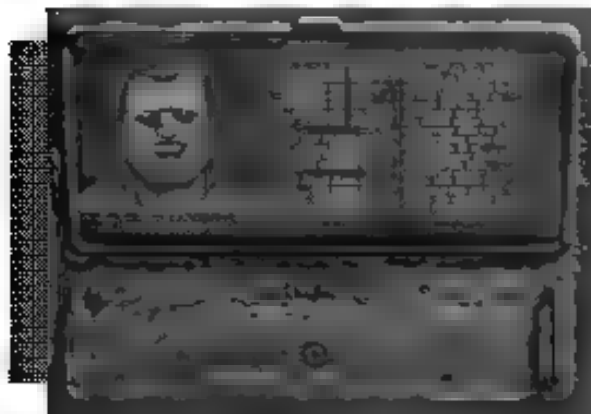


Figure 4-2
Character
Selection
Screen

Once you have selected or created a character, the game will start. Press ESC to bypass the Overseer briefing, once you have seen it.

You will start Fallout outside Vault-13. Your first mission is to explore the nearby area and then head for Vault-15, to the east. You have to exit the caverns to do this.

Using the Vault Instrumentation panel or the Interface as it is more commonly called, you will interact with the game world and control your character.

In the event of exposure to radiation, you must shower with a large amount of water as soon as possible. Lather, rinse and repeat.



GAME VIEW

An example of the normal game view is below

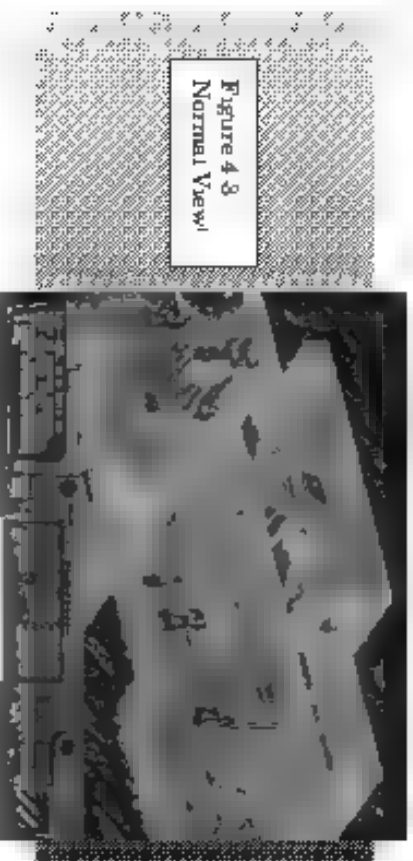


Figure 4 3
Normal View¹

The top part of the screen is called the game view. This is where the action takes place. Your character and the non-player characters (NPCs) inhabit this part of screen. It is in this view that you perform most of your actions such as: moving around, grabbing items, talking to people, fighting, opening doors, exploring, and more.

The bottom part of the screen is the interface bar. Here you will perform actions such as accessing inventory, selecting a weapon to attack with, go to the character screen, select options, get feedback from the display window and more.

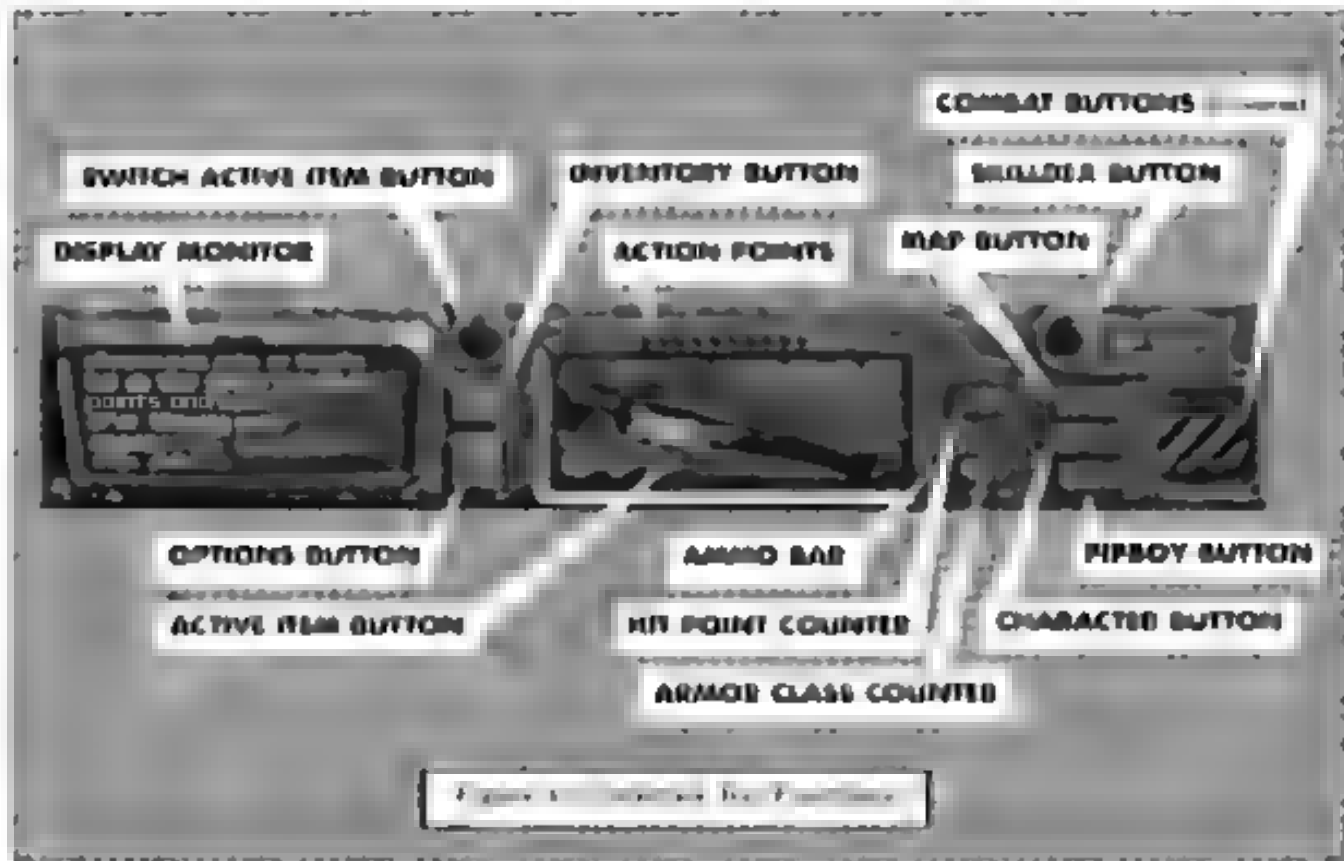
INTERFACE BAR

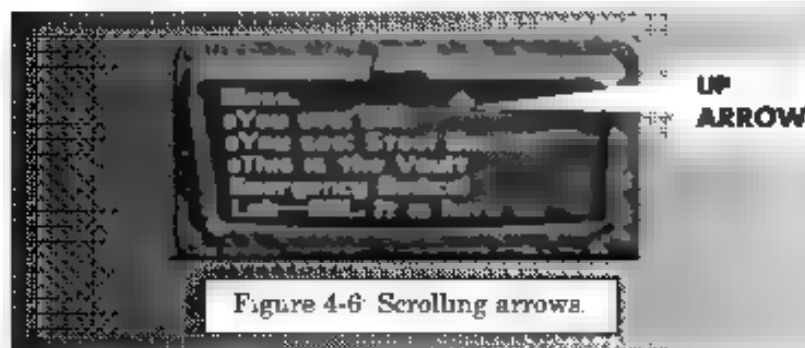
The lower part of the normal game screen is called the interface bar. This is what it looks like:



Figure 4 4 The Interface Bar

A diagram and description of all the Interface Bar functions is on the following pages.





Display Monitor. The monitor prints out feedback as you perform actions. These little messages are important, so try not to miss any. Fortunately, you can scroll back to older messages by moving the cursor over the display until the cursor changes to a small arrow.

If the cursor is at the upper part of the display, then it will be an up arrow. Left-clicking now will scroll back to older messages.

If the cursor is at the bottom part of the display, then it will be a down arrow. Left-clicking now will scroll back to the more recent messages.

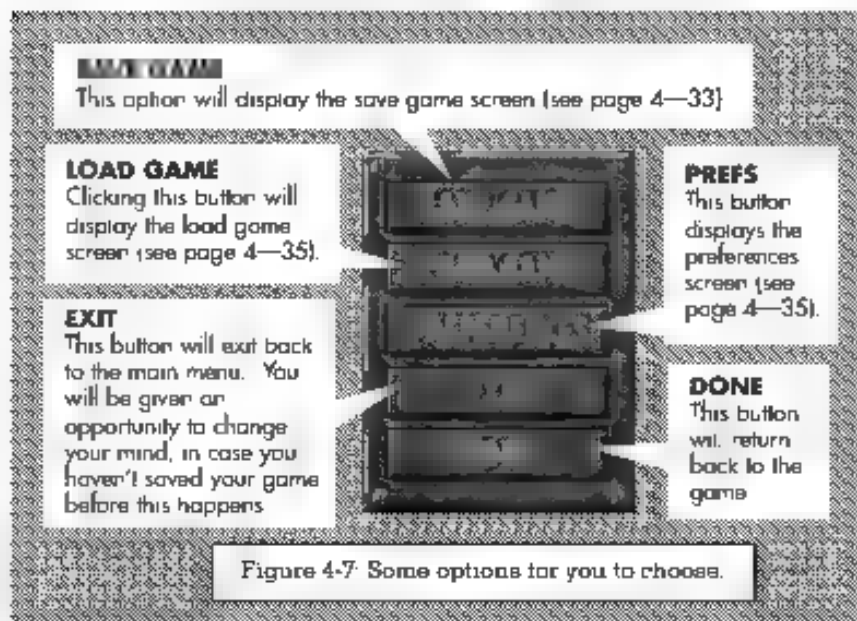
If a new message is printed while you are reading older messages, the display will jump back and display this new message. Don't be alarmed, this is good for you.

Switch Active Item Button. You can have two items prepared for near instantaneous use; these are called Active Items. You prepare the items in Inventory (page 4-12). This button will let you switch between the two active items. It's a toggle. Click it once, and you go to Item 2. Click it again, you go to Item 1. Click it again, you go to Item 2. Click it again, you go to Item 1. And so on.

Inventory Button. If you click this button, it will open Inventory (see page 4-12). In combat, this will cost you some action points. Even if you do nothing in Inventory, you still lose the action points.

Action Points. This row of lights will tell you how many action points you have remaining. Action points are only used in combat, so if these lights are glowing, then you must be in combat. As you use action points, the lights will blink off. When you get your full complement of action points back at the start of a combat turn, the row of lights will light back up.

Options Button. This button will display the options available



See page 4—33 for more information regarding the various options.

Active Item Button. This is where your current active item is displayed. Left-clicking on this large button will use the item. Right-clicking will toggle between different modes. Only weapons have different modes.

The AP cost in the lower left-hand corner will tell you the number of action points that using this item will cost you. If you don't have enough action points remaining (see your action points bar above the active item), then you cannot use this item this turn. Action Points only matter in combat.

Sometimes, there will be a mode or option in the upper right-hand corner. This is telling you what action using this item will perform. You can sometimes right-click on this button to change the mode.

Some weapons can also make targeted shots. This will always be a different mode. You will see a target in the lower right-hand corner when the targeted shot mode is ready.

Ammo Bar. Some weapons and items have an ammo bar showing how many shots or uses they have left before running dry. Pay

close attention to this bar. When the bar is full, you have all or most of your ammo available. The bar will drop when you use these consumables. When you are dry, the bar will disappear.

To get more specific information about your ammo or energy count, use an Examine on the item (see page 4—10).

Hit Point Counter This counter will show the number of hit points remaining. When you are healthy, the counter will be in white. When you are hurt, the counter will be yellow. When you are close to death, the counter is in red.

If your hit points ever reach 0, you die and the game is over. You will need to reload a previously saved game, or start the game over from the very beginning.

Armor Class Counter Your current armor class, based on your character and what armor you are wearing, is shown here. During combat, this counter may go up and down. If you have any extra action points when you end your turn, they are converted to an armor class bonus. This would explain the changes you may see.

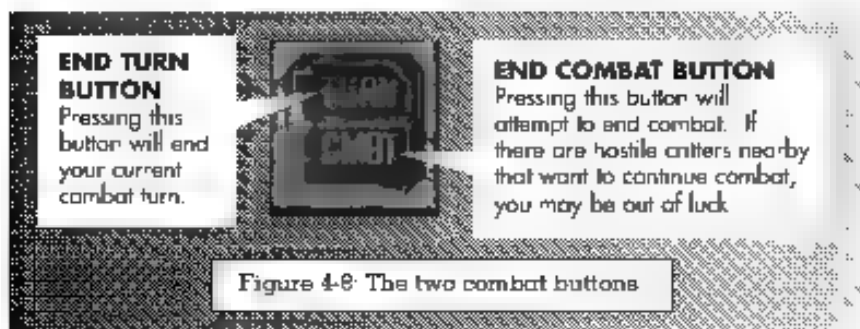
Skilldex Button. Pressing this button will display the Skilldex (see page 4—16).

Map Button. Pressing this button will display the Automap (see page 4—24).

Character Button. Pressing this button will display the Character Screen (see page 4—17).

PIPBoy Button. Pressing this button will display the RobCo PIPBoy 2000 (see page 4—20).

Combat Buttons. When you are involved in combat, the panel covering these two buttons will slide open, revealing



INVENTORY BAR VS. CURSORS

If you have a cursor like a skill target cursor or a targeting cursor, moving it over the interface bar will cancel that action and give you the normal mouse pointer instead. If you want to shoot someone to start combat, click the weapon in the active item button, and move the little red crosshair out to the game view. Move the crosshair back to the interface bar to stop the attack.

CURSORS

Action Cursor You control your character with the Action Cursor, a simple device that will take a brief moment to learn. The Action Cursor allows your character to move, fight, and interact with the environment and to manipulate objects.

In the normal game view, there are three modes the Action Cursor can be in:

Movement Command Targeting

The third mode, targeting, is only available during combat or when you attempt to target a weapon to start combat.

To change between the various modes, right-click once. If you continue to right-click, it will cycle to the next mode. To get to the command cursor from movement, right-click once. Outside of combat, another right-click will take you back to the movement cursor. During combat, a right-click from the command cursor will go to the targeting cursor.

MOVEMENT CURSOR

The default cursor is the movement cursor, also called a hex cursor.

To walk, move the hex cursor around the screen to where you want to walk to and then click the left mouse button. If the route to the destination is clear, your character will find the shortest path to the destination. If you can't walk to the location, a red X will appear in the center of the hex cursor. If you attempt to left-click while there is an X, it will do nothing. If you want more control over where you walk, click closer to your character and make shorter walks.

If you want to run, hold down a SHIFT key while you left-click. You can interrupt your character in mid-step, simply click the left

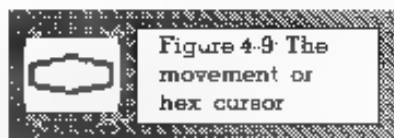


Figure 4-9: The movement or hex cursor

mouse button with the hex cursor in a new spot. Your character will immediately move towards the new location.

COMMAND CURSOR

Walking is fine and dandy, but if you want to interact with something (like opening a door, or talking to a person), you need to use the command cursor.



Figure 4-10: The command cursor

Use this cursor to point to the object or person that you wish to interact with. If you move the cursor over an object, and let it rest for just a second, an icon will appear next to the cursor. This icon is telling you what the default action is if you left-click the mouse button while over this object. You do not have to wait for the icon to appear before you click!

To do the default action, left-click once.

If you want to see other actions that you can take, left-click and hold the mouse button. A column of action icons will appear. While holding the mouse button down, move the mouse up or down. The highlighted action icon is the action you will perform when you release the mouse button.

Pausing the command cursor over an object for a moment will also display the name of the object in the display window on the interface bar below. To get more information about the item, use the Examine action (see page 4—10).

A list of the action icons is on the following pages.

TARGETING CURSOR

When you click on the active item button on the interface bar while it is showing a weapon in an attack mode, you will get the targeting cursor. Often you will want to do this to start a fight. You will also see this cursor commonly during combat, so get used to it.

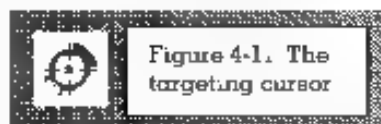







Figure 4-11: The targeting cursor

If you hover this cursor over an acceptable target (like that guy over there who gave you a dirty look, or that salivating radscorpion), then you will get either a number or a red X.





The number is your percent chance to hit, modified by the light level, the range, your skill, and its armor class.

The X means that you cannot possibly hit the target. See Chance to Hit (page 5—4) for more information.

ACTION ICONS

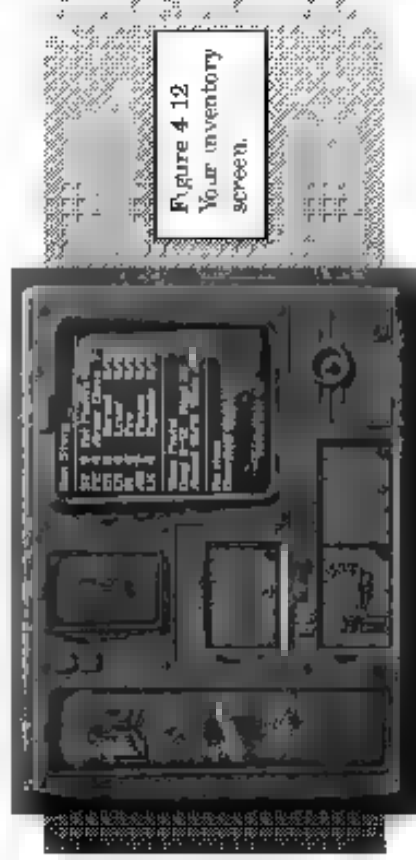
ICON	DESCRIPTION
	<p>USE ITEM/GET</p> <p>Performing this action will attempt to pick up an inventory item (like a rock), or use a scenery item (like a door). Basically if the item is small, it will attempt to add it to your inventory. If you have enough room in your inventory, the item will be added to the bottom of the list. If the item is large, you will attempt to manipulate it somehow. <i>You can get inventory items, loot bodies, and use scenery objects.</i></p>
	<p>EXAMINE</p> <p>If you want more detail about an object or person, use this action. You will get a longer description of the item or person, often with important information (like how much ammo is left in a gun, or how wounded a person appears to be). <i>You can examine virtually anything in the game.</i></p>
	<p>USE SKILL ON</p> <p>To use one of the skills that require your active use, you can select this action. The skilldex will be displayed and you can select the skill that you want to use on this item. Some skills are not available, depending on what the object is that you are using this action icon on. <i>You can use this icon on any object that a skill can be used on.</i></p>
	<p>DROP ITEM</p> <p>Only available in inventory. If you no longer want to carry an item around, and your inventory is getting a little crowded, then use this action. It will drop the item at your feet. Use this action carefully. If you drop an important item, then the game could be lost. It's possible to return later and pick the object up, but it's also possible that the object will disappear forever. <i>This obviously only works on inventory items in your inventory.</i></p>
	<p>ROTATE CHARACTER</p> <p>Your facing can be important. To rotate your character clockwise use this action. Every click will rotate you one hex-facing. There is no Action Point cost to use this action in combat. <i>This action only works on yourself.</i></p>

ACTION ICONS

ICON	DESCRIPTION
	<p>TALK</p> <p>If you want to communicate (and hey, who wouldn't?) then this action is for you. Talking will attempt to start a dialogue with a living, breathing person. You cannot talk to the dead, or the unconscious. Some people will not want to talk to you anyways. Others will only have a little to say, and their comments will appear over their head in the game view. If someone has a lot to say then you will go to the Dialogue screen (see page 4—28).</p> <p>Also, modern computers have voice inputs, so you can actually talk to a think machine or a computer workstation, in some cases.</p> <p><i>This action only works on people, and some computers.</i></p>
	<p>USE INVENTORY ITEM</p> <p>If you want to heal a person with a stimpak, or use a set of lockpicks on a "stuck" door, then use this action. Once you select your target and use this action icon, a small version of your inventory will appear. Scroll down if necessary, and select the item you wish to use, and your character will attempt to use it on the target.</p> <p>Obviously, using a piece of fruit on a door isn't going to do much, but that same piece of fruit can be given to another person to eat. See Inventory (page 4—12) and Equipment (page 5—4) for more information.</p> <p><i>This action will work on people and on scenery objects.</i></p>
	<p>UNLOAD AMMO</p> <p>If you want to remove ammo from a gun, then use this action. It will work in the inventory or loot screens. Often, you will want to just take the ammo from a dead opponent and leave the heavy gun behind. Or, you might want to change the type of ammo you have in your favorite firearm. This is the perfect way to handle these situations.</p> <p><i>Only works on weapons that contain ammo, and only in the inventory and loot screens.</i></p>
	<p>CANCEL</p> <p>If you don't want to perform any of the above actions on the target, select the cancel action, and it will be as if nothing happened.</p> <p><i>Always available from everywhere on everything.</i></p>

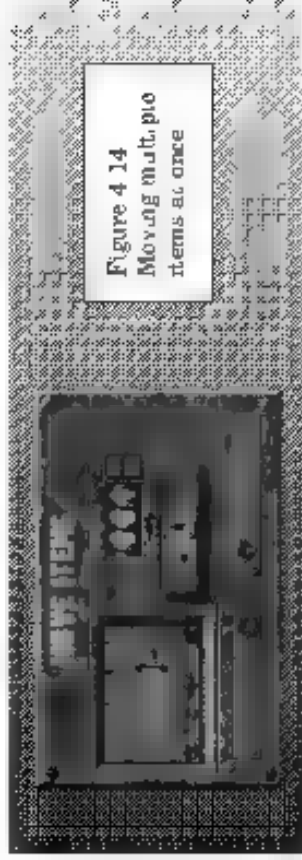
INVENTORY

Your inventory screen is where you keep track of, and use, items that you may find in your adventures. You can carry a maximum weight of items equal to your carry weight. Items will have a different weight. Examine an item to get the individual weight of that item.



You have an inventory cursor and an inventory action cursor. Right-click, like normal, to switch between them.

The inventory cursor looks like a hand, and allows you to pick up and drop items. Click on an item and hold the mouse button down. Move the mouse to the desired location and release the button to drop the item on its new spot. If you are moving more than one item, then when you drop the item into its new location, a special menu will appear.



Click the arrow buttons to increase or decrease the number of items to move. The counter starts at one. 1 item. Press the ALL button to increase the counter to total number of items in the stack. Select CANCEL to cancel the entire move. You will also get this menu if you drop a stack of items.

If you move COMPLETELY IDENTICAL items on to each other, they will "stack". Stacked items are a little more convenient. If you have stacked items, a number will appear on the stack showing the number of items in the stack. In the case of ammunition, it will show the total number of rounds in the stack, not the number of magazines. When you move ammo, you move it by magazine not by individual rounds. Get that?

The inventory action cursor allows you to perform actions on items in your inventory. The USE action will use the item automatically on you. The DROP icon will drop the item to the ground. You will be able to pick the item up again, under 99.9% of the circumstances. If you leave the item around, it is possible that it will be picked up by another character. And if you drop an item while in the deserted wastes of the world map, you will never see it again. So think carefully before you drop an item. Loose hands drop items!

The inventory screen is divided into three parts: Display Monitor, Equipped Items, and Inventory List.

The Display Monitor gives you important information about your character and items that you examine. As you move inventory items around, the Display Monitor will update to show you the new statistics of weapons, armor, and other pieces of equipment. Use the display monitor to compare two different weapons, for example, and you will be ahead of the game.

The Equipped Items include what armor you are wearing and what two items you have prepared as active items. A viewer shows you with your equipped items.

The Inventory List shows the remaining items in your back pack. They aren't as immediately accessible as your active items, but this only really matters during combat.

INVENTORY MONITOR FUNCTION

When you first enter the inventory screen, or when you do an examine on your character portrait, you will get some basic information about you.

PE

Your current Perception

EN

Your current Endurance

CH

Your current Charisma

IN

Your current Intelligence

AG

Your current Agility

LK

Your current Luck

CURRENT ACTIVE ITEMS

Weapons will show basic damage, ammo, loaded, range, and other pertinent information. Other items will have brief descriptions of important information.

ST

Your Strength, including any modifiers from radiation, chems, or other effects. This is known as your current Strength.

NAME

Just in case you forgot

HIT**POINTS**Current
Maximum**TOTAL WEIGHT**

This shows how much equipment you are carrying in pounds. You cannot carry more than your Carry Weight. If this number gets close to your maximum carry weight, you should start considering what items to drop. There is no disadvantage for carrying a lot of equipment.

ARMOR CLASS

This area shows the armor class, damage resistance, and damage threshold for the armor you are currently wearing. Normal damage is bullets, knives, and blunt objects (like that big ugly fist that you see coming towards you right now). Laser damage is from lasers. Fire damage is from flamers. Plasma damage is from advanced weapons. Explosion damage is from explosives (like grenades and rockets). EAMP (electro magnetic pulse) damage doesn't affect humans, so it is not listed.

Damage Type	Resistance	Threshold
Normal	10	100
Laser	5	50
Fire	5	50
Plasma	5	50
Explosion	5	50

Armor Class

Damage
Resistance

Damage Threshold

Figure 4.13 The inventory display

AMMO ACTIONS

Loading Weapons. You can drag ammo to a gun, and it will attempt to load the gun. To load the gun successfully, the ammo caliber must be the same (examining the weapon and the ammo will tell you their calibers). The ammo type must be the same, as well. You cannot partially load a gun with hollowpoints and then fill it up with armor piercing. If the gun is completely loaded, you will not be able to stuff more ammo in it, obviously.

Unloading Weapons. To unload a weapon, use the inventory action cursor and select the Unload icon. The ammo will appear in your inventory.

You can also unload weapons from a loot screen. It is easier to carry any recovered ammo without carrying duplicate versions of the weapon itself. It also weighs less to only carry the ammo.

OTHER INVENTORY ACTIONS

Inventory List. The final part of your inventory is the list of items that you are carrying. This is called the inventory list. It is a long bar on the left-hand side of the screen.

If you want to move an item up or down the list, simply pick it up and drag it to its new location.

If you drag completely identical items on to each other, they will stack. Weapons are only identical if they contain the same exact amount of ammo and the ammo itself is the same. Therefore weapons will not stack very often.

Containers. Containers are a special kind of item that can store items within themselves. A backpack or a bag would be a container. Containers don't let you carry more equipment than you can lift, your carry weight, but they do let you organize items better.

You can drag items to the container from the main inventory list. Simply drop the item on the container to add it to the container.

To open a container, use the inventory action cursor and select the Use icon. The viewer will be replaced with an image of the container and the inventory list will show what is in the container.

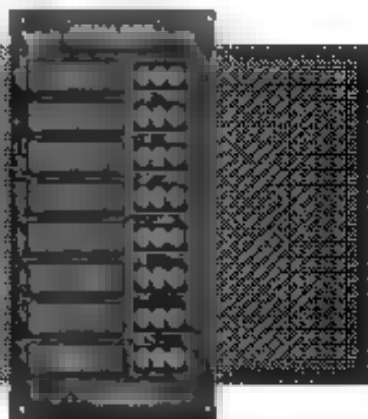
If you want to move items out of the container and back into the main inventory list, drag the item to the image of the viewer.

To close the container, click on the image in the viewer.
Containers cannot stack.

SKILLDEX

Some skills are used automatically, like the combat skills. When you shoot a gun, you are automatically using the appropriate skills. Other skills need an active use by you. These skills are available in the Skilldex.

Figure 4-16 Your Skilldex



Proper latrine building is an important outdoor survival skill. Practice this skill as often as possible.

Click on a skill name to use it. Most skills will require a target to use the skill on. If you want to cancel a skill use before you select a target, move the cursor over the interface bar.

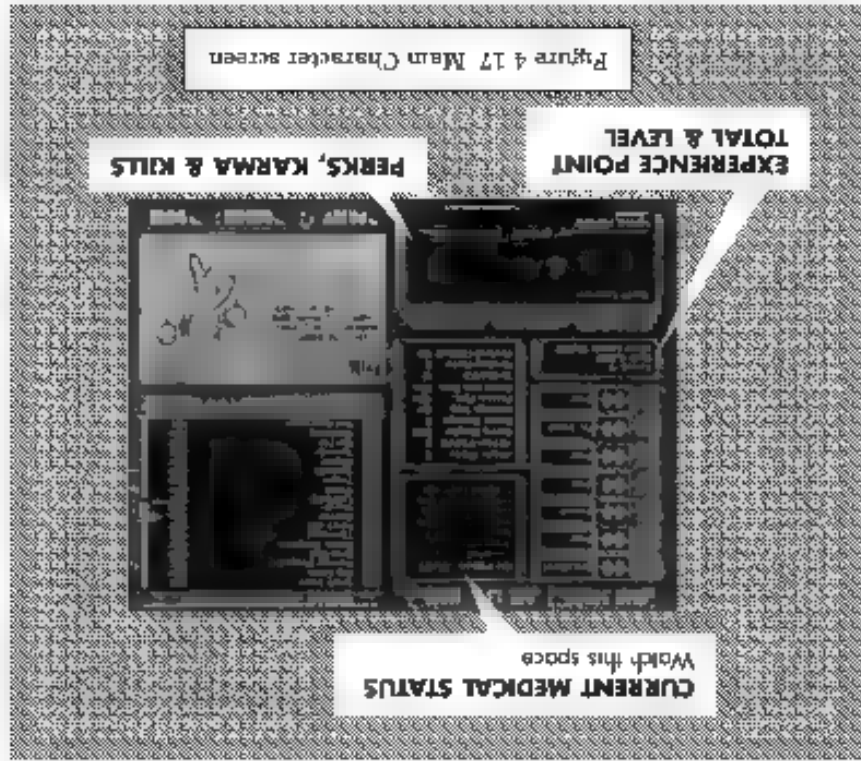
As a shortcut the skills can be used by pressing the 1 through 8 keys. Do this, it saves valuable time.

Only Sneak will work without a target since it's just something you do. To stop Sneaking, you can either toggle it off by using the Skilldex again, or by running. As a reminder, when you are Sneaking, you will see a Sneak icon just above the interface bar.

See page 3-10 for a list of the skills and their uses.

CHARACTER SCREEN

While the Inventory screen is nice for giving you a brief rundown on your character the only place to get all the information is on the Character screen. You can access the Character screen from the interface bar



The primary purpose of the Character screen is to give you information about the status of your character. am I critically hurt? if so, where? poisoned? how many experience points do I have? when do I go up a level? how many extra skill points do I have? what are my exact skill levels? and more

So many questions, it takes a whole screen to give you the answers

If you made your own character or modified one of the three pre-made characters then most of this screen will be pretty familiar to you. If you didn't then it might take you a little longer to get used to

it, but it's not that difficult

You can click on any text or object of importance on this screen and the character card in the lower right-hand corner will display more information for you.

The right side of the screen will give your character name in case you forgot and your current primary statistics.

Immediately below that is your experience point total and level. As you gain experience for performing deeds and combat, the numbers in this area will change. The "Level" is your current character level, the higher the better. The "EXP" is obviously how much experience you have earned to this point. The more the merrier. The "Next Level" line is showing how much experience you have to earn until your next level advancement.

In addition to your current and maximum hit point information, which you can find elsewhere as well (on the interface bar and in the inventory screen), the character sheet will show other important medical problems with your character.

The text lines beneath Hit Points should be a dull green. That's a good thing. If the lines are bright green, that means that you have that particular problem.

"Poisoned" means that you have been poisoned. Poison in *Fallout* is fairly dangerous if not treated, but is usually not fatal. Poison does damage over time. The more poison you have been infected with, the longer you will take damage. Fortunately, as the poison starts to wear off, it takes longer and longer after the poison hurts you before it hurts you again. Still, avoid it if you can.

"Radiated" means that you have a measurable amount of radiation damage. Radiation still lingers in the form of fallout (note the lower-case version of this noun, as compared to *Fallout* - an important difference) and other hot spots. It has been rumored that there are creatures that have been exposed to such a large amount of radiation that they can actually cause radiation damage by contact. Avoid them if you can. Radiation can have several bad effects, but in general, the more radiation damage you have accumulated, the worse the effect will be. You can tell the exact amount of radiation you have been exposed to by using a Geiger counter. You can get treatment for radiation in the Vault Emergency Medical Lab, located near the entrance. It is possible that other locations may be able to repair radiation damage.

"Eye Damage," "Crippled Right Arm," "Crippled Left Arm," "Crippled Right Leg" and "Crippled Left Leg" are all crippled limbs or body parts. You will generally receive these special types of damage in

combat. It is possible to heal these serious wounds at the Vault EML by using the Doctor skill or a visit to another trained medical personnel. The effects of these severe afflictions are cumulative.

Table 4-1 PERSONAL DAMAGE EFFECTS

DAMAGE	EFFECTS
Eye Damage	If your eyes are hurt, your Perception will be lowered until you heal this wound. Ranged combat will be much more difficult as a result.
Arm Damage	If one of your arms is hurt, you cannot use two-handed weapons. If both arms are crippled, you cannot use any weapons at all.
Leg Damage	If one leg is crippled, you will find it more difficult to move (taking more Action Points to move the same distance). It will also be impossible to run. If both legs are crippled, you will barely be able to move. Running will still be impossible. Out of combat, your character will look like he or she is walking normally, but this is a sham to protect yourself from dangerous predators. Get to a doctor quickly!

Above the character card (with the trademarked Vault-Man) are your character skills. If you have any spare skill points (any number above 000) then you can spend them on this screen to improve your skills (see Experience, page 5—21 for more information).

As your character explores the world, makes decisions and gains experience, you will be able to track some of that by using this handy multi-data display area.

The first electronic data card is "Perks." This will show all the Perks that you have chosen for your character and let you examine the effects of a Perk by using the character card. And, as a bonus, if you selected any Traits, they will be displayed on this card as well.

The second data card is "Karma." If you've been naughty or nice, this will be displayed here. All characters have a Reputation. It starts

at 0 zero. If you act nobly and perform great deeds, your character's reputation will rise (or go positive). If you act like a Commie, or other negative personality type, your character's reputation will sink (or go negative). Your character's reputation will affect different people in different ways. "Good" people will react positively to a good reputation, and poorly to a negative reputation. "Bad" people will react in the opposite manner. You may get other specific reputations as well, or you could react poorly to chems. If you do, these reactions to your actions will show up under Karma. Use the character card to find out more information.

The third card is "Kills". As one could expect from the title of this data card, this will show how many of what you have slain in battle. Think of it as a score card. You might be interested in knowing that the number of things slain (which can include people, animals, dangerous mutants) will have an effect on your game. The more you kill, the greater the effect. The exact ramifications of your kills will be discovered as you play.

On the right-hand bottom part of the screen are three buttons: PRINT, CANCEL, and DONE.

Print

This option will let you save the current record of your character as a text file on your own computer. Trade it with your friends, or gloat loudly. Select this option, and another screen will appear. Type in the name of the text file as you want it to be, and press ENTER.

Cancel

Return to the game. Any changes that you have made to your character since entering the character screen will be ignored, and your character returned to the state he or she was in before you entered the character screen.

Done

Accept any changes to your character and return to the game.

ROBCO PIPBOY 2000

To help Vault Dwellers record information, and information is extremely valuable, in fact, it might be the most valuable weapon we have against the end of civilization, so pay attention¹, Vault-Tec has selected the RobCo Industries RobCo PIPBoy 2000 as the Personal Information Processor of choice for its Vault Dwellers.

The RobCo PIPBoy 2000 (hereafter called the PIPBoy), is a handy device that you wear on your wrist. It's small, especially by today's standards, and it will store a goodly amount of information for you. And using modern super-deluxe resolution graphics to boot!

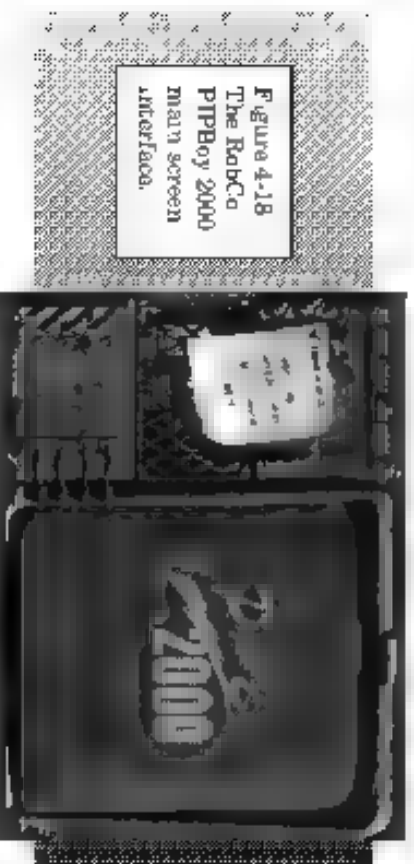


Figure 4-18
The RobCo
PIPBoy 2000
main screen
interface.

Use the buttons to select the various functions of the PIPBoy. Some of the function screens have text in the display window that can be selected as well. These text buttons will change brightness when you move the mouse over them.

Stats

Click on this button to view the current status of any adventure seed or task that you are on. The adventures will be sorted by location. Seeds that you are currently on, and have not finished, will be listed in green. Seeds that you have completed will be crossed out. As you get new tasks to perform, they will show up here.

Autonaps

Click on this button to display a list of the locations you have visited. Select a location to view the autonaps for that location. Your PIPBoy stores a map of all the locations you visit automatically. If you have a question of where a location is, use the Autonap feature.

Archives

The PIPBoy also has a video recorder. All moves are automatically recorded by the PIPBoy for later viewing. Select any previously viewed movie to watch it from here.

Close

Power down the PIPBoy for now and return to the Fallout world.

PIPB0Y CLOCK

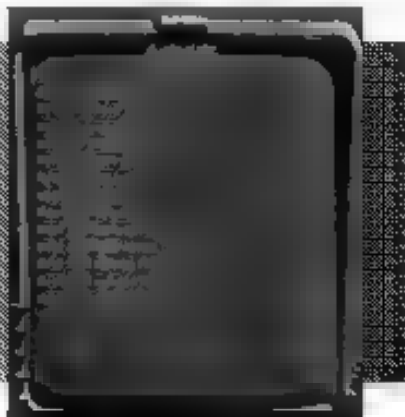
The PIPBoy also contains an alarm clock. To pass time quickly in the Falout world, use this alarm clock to rest until the time you set.



Figure 4-19: The RobCo PIPBoy 2000 Alarm Clock optional feature. Standard on all Vault-Tec supplied versions.

This part of the PIPBoy will constantly show the current game date and time. Click on the alarm clock icon to display the list of timer settings.

Figure 4-20: The RobCo PIPBoy 2000 Alarm Clock timer settings.



The various timer settings allow you to rest or sleep for

- 10 minutes**
- 30 minutes**
- 1 hour**
- 2 hours**
- 3 hours**
- 4 hours**
- 5 hours**
- 6 hours**
- Until 0600 (6:00AM)**
- Until 1200 (12:00PM - Noon)**
- Until 1800 (6:00PM)**
- Until 0000 (12:00AM - Midnight)**
- Until healed**

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Use the 10 minute to 6 hour timers if you need to meet someone at a certain time during the day or night. Some events only occur during the night or day. Some shops are only open at night, for example.

The until timers will advance the clock to the time you select. These are more powerful versions of the normal timers. Outside locations will follow a day and night cycle for the lighting. If you don't like the dark, sleep until 0600 and then wait for an hour.

The alarm clock will show your current and maximum hit points. If you rest, you will gain hit points every six hours. Sleep until the healing rate is restored hit points back at a faster rate. You get your morning and get a good night's rest. Optionally you can use the rest until healed timer setting, and then you will sleep until you are restored to maximum hit points.

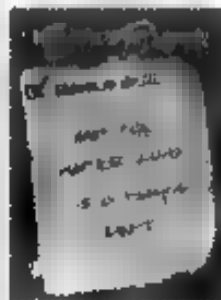
You can press ESC while resting to wake up.

THINGS TO DO!

The PIPBoy 2000 can be used to keep track of important dates and events.

We reprogrammed your PIPBoy to keep track of the number of days remaining in the vault water stores. This note is the only thing you should care about as we are safe and have a restored water processing chip.

The note shows the number of days before we "rock" - that happens your adventures on the outside won't be worth a set of thermal underwear. A death valley at high noon. We be dead. And we don't want that so to it.



And your PIPBoy has been programmed to properly handle all calendar dates, even after the turn of the century!

Your PIPBoy 2000 has a three month limited warranty.

RESTRICTED

AUTOMAP

To remind you where you have been, your helpful PIPBoy 2000 keeps track of all the locations you have visited, and what they looked like. These are stored in the Automap function. As you explore a map, more of it will be revealed and stored. The automap will keep track of all the walls and buildings that you come across.

As a helpful shortcut, you can access the automap for the town you are in by pressing this MAP button on the interface bar. It will only show the current level of the location. To see the other locations, you must access the full Automap list from the PIPBoy.

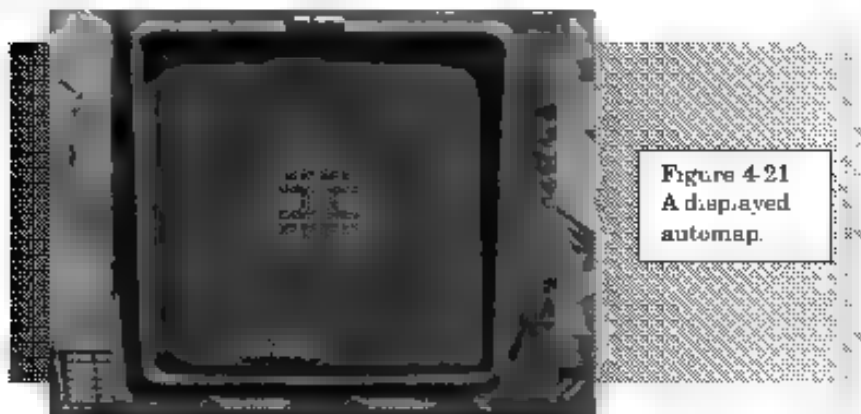


Figure 4-21
A displayed
automap.

The H/L toggle will change between high and low resolution. On high resolution, you can see more detail. The low resolution is sometimes easier to read.

The Scanner button will activate the Motion Sensor if it is one of your active items. The Motion Sensor will display the other creatures and people on the map, in addition to yourself. The motion sensor will only work on the current map; you cannot scan a map that you are not on currently.

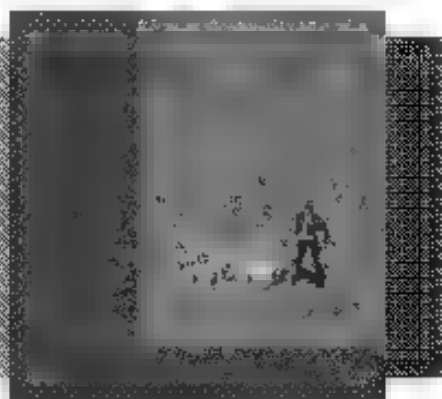
The CANCEL button will return you to the game.

WORLD MAP

The game view and automap are great for small areas, but the wasteland is a large place. To move from location to location, you need the world map.

You go to the World Map when you reach the edge of a game map, as shown here:

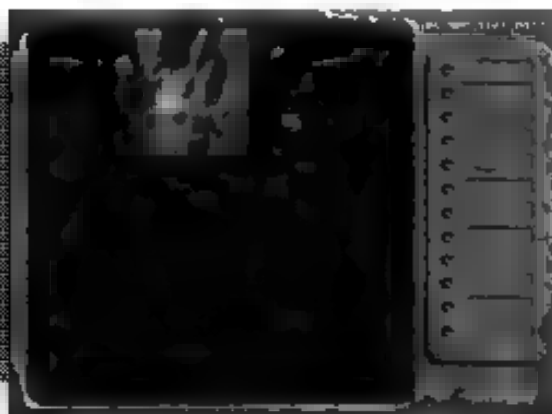
Figure 4-22: The dark areas show where you will exit the game map



Walking into that dark area will automatically transport you to the world map. You can use this to escape from a hostile location, but don't expect a happy welcome when you return.

The world map looks something like this:

Figure 4-23:
The Fallout
World.
Pretty dark



Click on the TOWN/WORLD MAP button to switch between the town (see page 4-27) and world maps.

As you start, most of the world will be dark. These are places that you have not yet explored. The immediate area around you has been slightly illuminated. You have seen it, but not yet been there. When you do walk into a new area of the world map, it is brightened and the squares around it have been marked as viewed from a distance.

Click on the world map to start traveling to that location. You can click into the darkness, in fact you need to do that to explore the unknown areas ahead of you.

The date and time are shown in the upper right-hand corner. Time is a critical aspect of Fallout. Try to accomplish your goals in as little time as possible. Traveling across the world will be one of your largest wastes of time. Travel as carefully as possible. The people of the Vault are depending on you.

Important locations are marked with a green circle on the world map. Every important location is therefore a little easier to see. Once you have visited an important location, it will be added to the list on the right-hand side of the world map screen.

To visit a previously explored location, all you have to do is click on the button next to the location name. You will start moving towards that location automatically.

When you reach your destination, via the location bar or by exploration, an upside down green triangle will appear. Click on the triangle to visit that location. You can always click on a new area to explore, if you want to continue on.

If you are interrupted by a random encounter, you will see a flashing red lightning bolt. You will then automatically drop down to the terrain map and be involved in the encounter. Any items left on a random encounter map after you leave the map will be lost forever.

TERRAIN

Some terrain is more difficult to travel than others. In Fallout, there are four different types of basic terrain: Mountain, Desert, City and Coastland. Mountain terrain is the most difficult to move over and will take the longest amount of time. Desert and Coastland terrain are normal. City terrain, even with the ruins, is easiest to travel, and will take a shorter amount of time than normal.

Terrain will also determine what kind of encounters you may have. More people will be found closer to cities and spots of civilization. Monsters, and other bad things, are found farther away from these places of humanity. You are more likely to have a lot of random encounters in some areas than others. If you are being beat to death by random encounters, pull back and try a different area until you gain experience, skills and equipment.

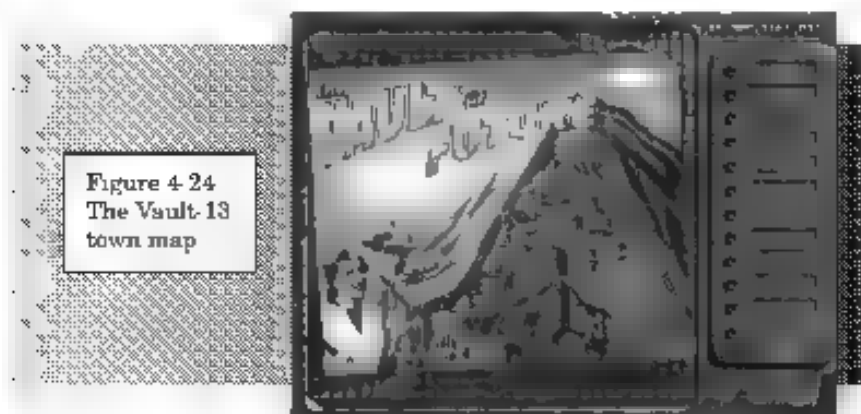
Some of the encounters may be hostile creatures, friendly traders, environmental concerns like radiation hotspots, and other

more bizarre events. Not all random encounters are bad, but neither are they all good.

TOWN MAPS

All of the important locations in the game will have a town map, or a closer view of the area. The town maps serve several functions. In addition to being an aid to remember what areas are at a particular location, they are useful for movement.

To access the town maps, click on the TOWN/WORLD MAP button on the world map screen. A town map will appear.



To change town maps, click on a known location button on the right-hand side of the screen. You can only view the town maps of locations you have visited.

Notice that the town map has one or more inverted green triangles. These location markers will access different areas within the town. Move the cursor over a marker to view the name of the specific area that marker represents. Click the marker to travel to that area within the town. This will work even if you are hundreds of miles away. You will travel via the world map to their chosen location, and then enter the town there.

When you visit a new town, usually only one marker will be available. As you explore a town, more markers will become accessible. It is possible for a previously accessible marker to disappear. If this happens, you have usually done something to incur the wrath of the natives in that location. You will have to find another way to get from one area to the next.

DIALOGUE

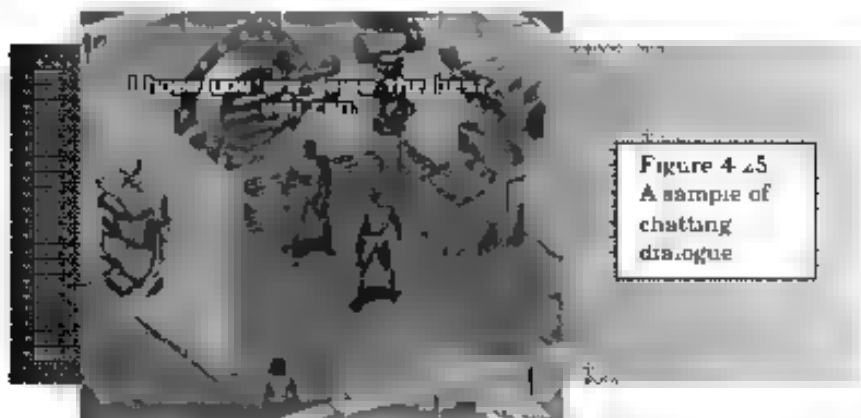
Talking to people will take some of your time and a lot of your attention to perform properly. You must balance their reaction to you, what you can say to them, and at the same time watch for clues. The payoff can be worth it.

To start talking to people, use the command cursor and the Talk action icon. The Talk icon is the default or standard action when you click on a person. Some people will initiate dialogue on their own, but all dialogue works the same once you start a conversation.

There are two different types of dialogue: chatting and extended dialogues.

CHATTING DIALOGUE

If someone has very little to say to you and you don't have a response, then they will just chat with you. A line of dialogue will appear over their head in the main game view, and you will not switch to the full extended dialogue screen. Normally, chats are inconsequential, but you should watch carefully. Sometimes a person will sneak important clues into a single chat. Sometimes a person will order you to do something, and if you persist in your current action, they may get very upset with you.

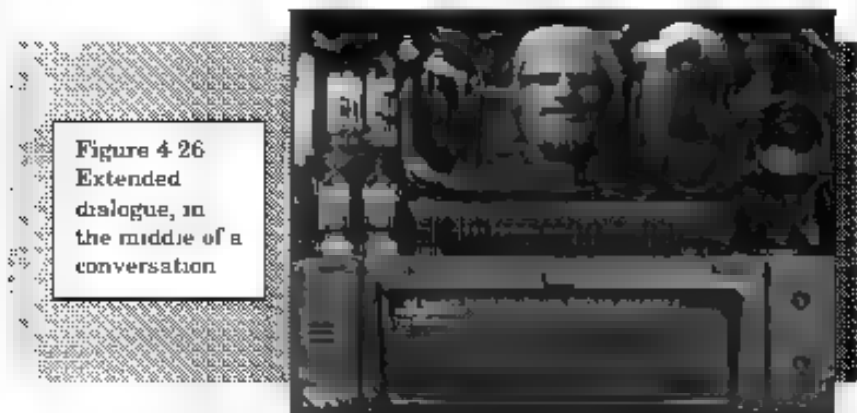


People will also chat during combat. These are called combat taunts. They usually don't have very many nice things to say to you then.

EXTENDED DIALOGUE

If someone has more to say to you than can be said in a line or two of dialogue, or if you will have the opportunity to question them and respond to what they have to say, then you will go to the full extended dialogue screen.

The extended dialogue screen has a place for you to see a close up of the NPC (if one exists), or a shot of the character you are talking to standing around in the game view, their dialogue, and your possible responses.



If the NPC does have a head, watch their expression for clues on their reaction to you. NPCs with heads will also have actual speech and you should listen closely to their lines to determine if there is anything special about what they have to say.

All NPCs will have a different reaction to you. They may like you, they may hate you, or they may care less. Most people will start out caring less, but your actions, reputation, and responses to their dialogue will change their opinion about you. Your Charisma will modify their initial reaction.

The NPC will usually have something to say to you. Their dialogue will appear below their portrait or picture. If the text of their dialogue will not fit within one screen, their dialogue will be displayed one screen at a time until you see their entire speech.

Below their dialogue are your choices. Based on your Intelligence, and what you know about the game world, you will have one or more options. If you only see [DONE] that means the conversation is over.

If you have a character with a high Intelligence, you will be able to say more in conversation. NPCs will react differently to a grunt for help compared to a well-discussed plea for mutual assistance. The most intelligent things that you can say are not always the best lines to choose. A character with an Intelligence of 3 or less will be a distinct disadvantage, unable to converse normally. People will have a hard time understanding your grunts and unintelligent speech.

To pick a line of dialogue for your character to say, move the mouse pointer over the line and when it highlights, click the mouse button to actually say that line. The NPC will usually respond to your comment or question and you will get a new batch of responses. Dialogue will continue until you run out of things to say, or until you say something that really angers the NPC.

Some of the lines have a chance of making the NPC respond one way or another. These lines will usually have some sort of roll associated with them, usually Speech, but sometimes another skill, or even a statistic. For example, if you tell a line there is a possibility that the NPC will see through your deception and get upset. Some NPCs may be more glib or perceptive than others, so there can be a modifier to your skill or statistic. These special lines are not marked. You will have to discover which lines have attached rolls by discovery, trial and error. Common sense will help, too.

REVIEW

If you want to review the current conversation, click the REVIEW button on the dialogue screen. You will be able to see what the NPC said, your response, and so on.

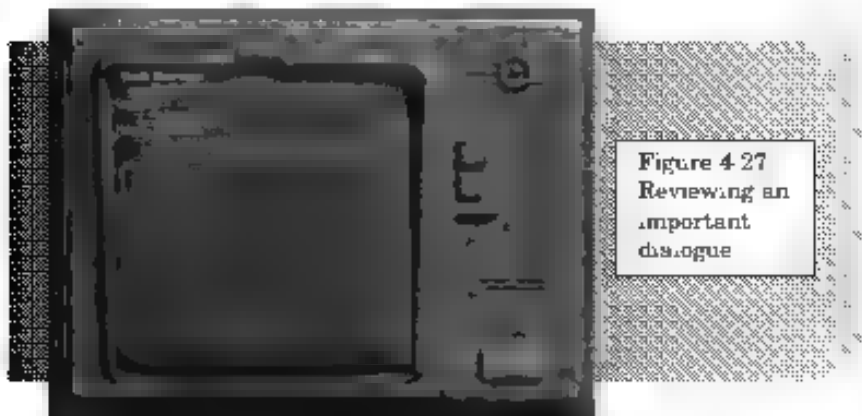


Figure 4.27
Reviewing an
important
dialogue

The arrows will move the conversation up and down in case it goes on longer than one screen. Press the DONE button to return to the conversation.

You cannot review a previous conversation once you leave a dialogue.

BARTER

Barter is the exchange of goods. Trade.

In a post-nuclear world, Vault-Tec believes there will be no real monetary system. People must resort to the ancient tradition of barter to exchange goods for goods, or goods for services.

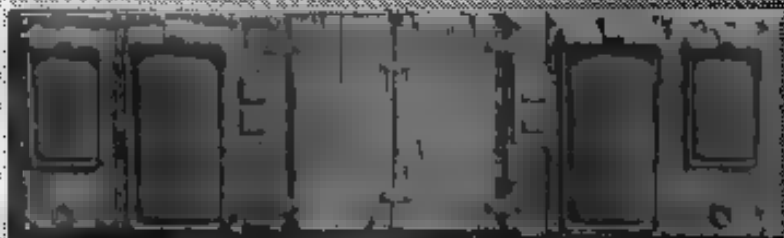


Figure 4-28: The bartering interface

To access the bartering interface, click the BARTER button from the dialogue screen. If the character wishes to barter with you, and most will, then the barter interface will slide up and cover your response area.

If you decide to cancel bartering, click on the TALK button.

To barter with an NPC, you must trade an equal amount of goods. In his or her eye. Your Barter skill will modify the worth of items in your inventory. A high Barter skill will make your loot more valuable. A low Barter skill will mean that you have to give more to get the same amount from an NPC.

Your inventory list is on the left-hand side. The equipment and items that the NPC is willing to barter away is on the right-hand side. The table in between the two inventory lists is where the bartering will take place.

Take items that you are willing to give up and place them on the left-hand side of the table. You cannot place items from your inventory directly into the NPC's inventory, nor can you take items directly from his inventory and put it into yours. You must use the table.

Moving multiple items will display the Move Item interface

Move the items from the NPC inventory list that you want. When you have moved what you feel is a fair deal, press the OFFER button. If the NPC is agreeable, he will say so in his dialogue screen. If he doesn't like the deal, he will say so, too. If you get an agreeable deal, the items that you are trading will move from the table to the appropriate inventory list.

If the deal is not agreeable to the NPC, you can sweeten the offer by placing more equipment from your inventory on your side of the table. Or you can reduce how much you want from the NPC by moving some of his items back to his inventory. Then press the OFFER button again, until you get an agreeable trade.

You can always cancel the barter and return to the regular dialogue screen.

Your reputation and reaction from the NPC will modify how they deal with you. If you have a good reaction with the NPC trader, you will get a better deal. If he doesn't like you, you will pay for it - literally. Your Barter skill, however, is the primary factor, along with the Barter skill of the NPC. The higher your skill, the better deal you will get. The higher the Barter skill of the NPC, the better deal they will get! A really poor trade offer may lower the reaction of the NPC.



In the event of fire, do not run! It will force the flames up to your head. Stop, drop and roll!

OPTIONS

The Options menu will let you save and load games (so you don't have to finish the game in a single sitting) and change preferences. You can also quit back to the Main Menu from the Options menu.



SAVE GAME

When it comes time for you to stop playing, saving your game will allow you to return later and pick up from where you left off. Saving your game as you are playing is also a very good idea. If some thing bad were to happen to you, then if you have a recently saved game, you can restore from that point without losing a lot of progress.

The save game menu is very simple

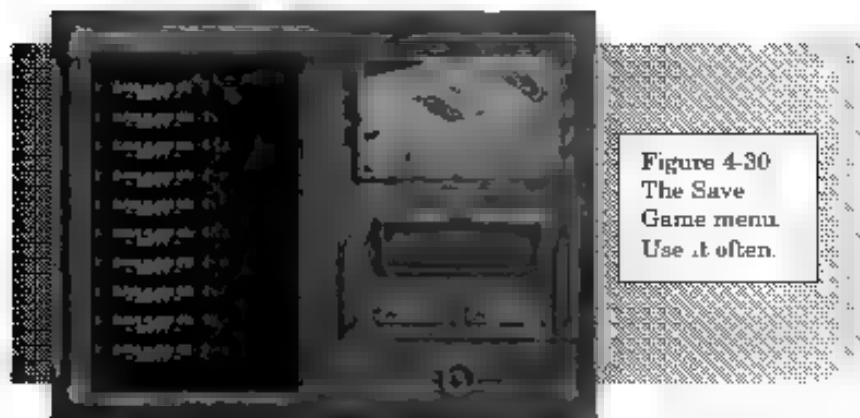


Figure 4-30
The Save
Game menu.
Use it often.

You have ten save game slots. A save game slot will hold one save game file, so you can save up to ten different locations or positions at a time. If you have already saved ten games, then you need to overwrite an earlier save game.

We here at Vault-Tec highly suggest that you use more than one save game slot at a time. We suggest that you start with slot 1, and work your way down the list of slots. When you want to save a game after slot 10, start over again at slot 1.

At the start of *Fallout*, all ten slots are empty. You can see what a save game slot contains by clicking on the slot position. A screenshot of what you were doing when you saved your game will be displayed in the upper right-hand corner. Your description of the game will be displayed as well.

To save a game, double-click on the slot you want to use or select it and click the DONE button. Type a description that will help you remember what you were doing. Press ENTER or click the DONE button in the description window. If you change your mind and don't want to save over this slot, click the CANCEL button.

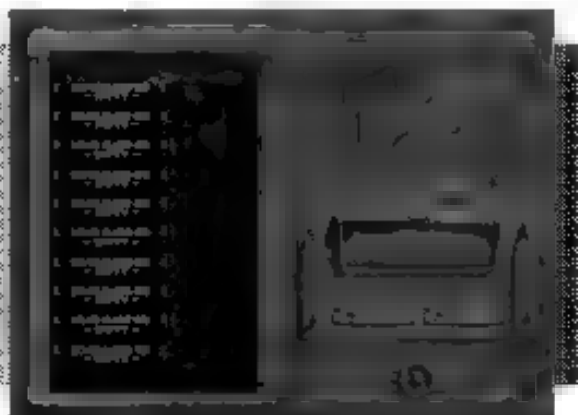


Figure 4-31 Entering a description for the saved game

LOAD GAME

When it comes time for you to load a previously saved game see above , then you need to use the load game menu

Figure 4-32
The Load
Game menu.
It loads games



The load game menu is very similar to the save game menu. A list of save game slots is displayed on the left-hand side. A screenshot is in the upper right-hand corner, and the description of the displayed save game is below it.

To load a previously saved game, double-click on the appropriate slot or click the slot to highlight it and then press DONE.

If you don't want to load an old saved game, click on the CANCEL button.

PREFERENCES

Figure 4-33
User-selectable
Preferences
Menu

Preferences are user settings that allow you the user to customize or control aspects of the game. If you don't like the way those non-player characters are taunting you during combat, then go right ahead and turn their comments off! You can do it, we trust you.

You can access the preferences menu from the interface bar pressing the O button, or by using the keyboard equivalent "O", and selecting Preferences.

Following is the list of preferences. The underlined option is the default setting.

Game Difficulty [EASY, NORMAL, HARD]

Controls the difficulty level of reactions and other non-combat skill rolls. Negative reaction modifiers are halved, and all non-combat rolls are made with a +20% bonus if set to Easy. If set to Hard, all negative reaction modifiers are increased by 25%, and all non-combat skill rolls are made at -10%.

You can adjust this at any time during the game, and there is no penalty or reward for using a setting besides normal.

Combat Difficulty [WIMPY, NORMAL, ROUGH]

Controls the difficulty of the combat. On Wimpy level the opponents have a negative modifier to hit and damage, and use less targeted shots. On Rough level your opponents will hit more often, do more damage, and use more targeted shots.

There is no penalty for using a lower combat difficulty level. There is no reward for using a higher difficulty level. It is strictly a personal preference. You can adjust the combat difficulty setting at any time during the game.

Combat Speed [SLIDER, NORMAL -> FASTEST, PLAYER CHECKBOX]

Controls the animation rate in combat. When set to Normal it works as usual. Moving the slider towards Fastest, will increase the rate at which combat moves, with the exception of the player's actions, and when a critter targets or attacks the player. If the Player checkbox is marked, it will also speed up the player's actions, and when the player is targeted.

If combat is moving a little too slow for you, then adjust this setting until you are happy with the speed.

Combat Taunts [ON, OFF]

This option turns the combat taunt messages on and off. These are the messages that non-player characters (everyone except you) say during the middle of combat. You can say whatever you want, just don't annoy your neighbors - Vault-Tec will not be responsible for any neighborhood complaints.

Combat Messages [VERBOSE, BRIEF]

When set to Verbose, the combat messages will use the longer more detailed messages. When set to Brief, the combat messages will be very short, showing only the critical pieces of information.

Target Highlight [ON, OFF, TARGETING ONLY]

When On, legal targets are highlighted during combat. When Off they are not. When set to Targeting Only, the highlights only appear when the player is using the targeting cursor.

Violence Level [NONE, MINIMAL, NORMAL, MAXIMUM BLOOD]

This preference controls the maximum death animation level shown to the user. Maximum Blood shows all three levels. Normal shows up to the second level. Minimal shows critters falling over with blood. None shows the critters falling over without blood. There is no practical difference in the game. What level the violence meter is set to is purely personal.

Text Delay [SLIDER SLOW -> NORMAL -> FASTER]

This option will control for how long the floating text and dialogue screen messages are displayed. Slow speed messages are displayed for twice as long, and Faster messages are displayed for half as long.

Language Filter [ON, OFF]

When this filter is set to On, Fallout will not use as much adult language. With the Language Filter set to Off, you will see stronger language used. There is no practical difference in the game. The choice of having the language filter on is purely personal.

Running [NORMAL, ALWAYS]

If set to Always, the character will run instead of walk if the shift button is not pressed. Pressing the shift button will walk the character instead of running, if Always is selected. Normal works normally.

Master Audio Volume [SLIDER OFF -> QUIET -> NORMAL -> LOUD]

Controls the overall volume of audio. If set to Off, it overrides all other audio settings. The Music, Sound Effects and Speech volume controls will adjust their volume based on the master audio volume control.

Music/Movie Volume [SLIDER OFF -> QUIET -> NORMAL -> LOUD]

Controls the volume of the music and the audio during the cinematic movie sequences.

Sound Effects Volume [SLIDER OFF -> QUIET -> NORMAL -> LOUD]

Controls the volume of the sound effects.

Speech Volume [SLIDER OFF -> QUIET -> NORMAL -> LOUD]

Controls the volume of the digitized speech.

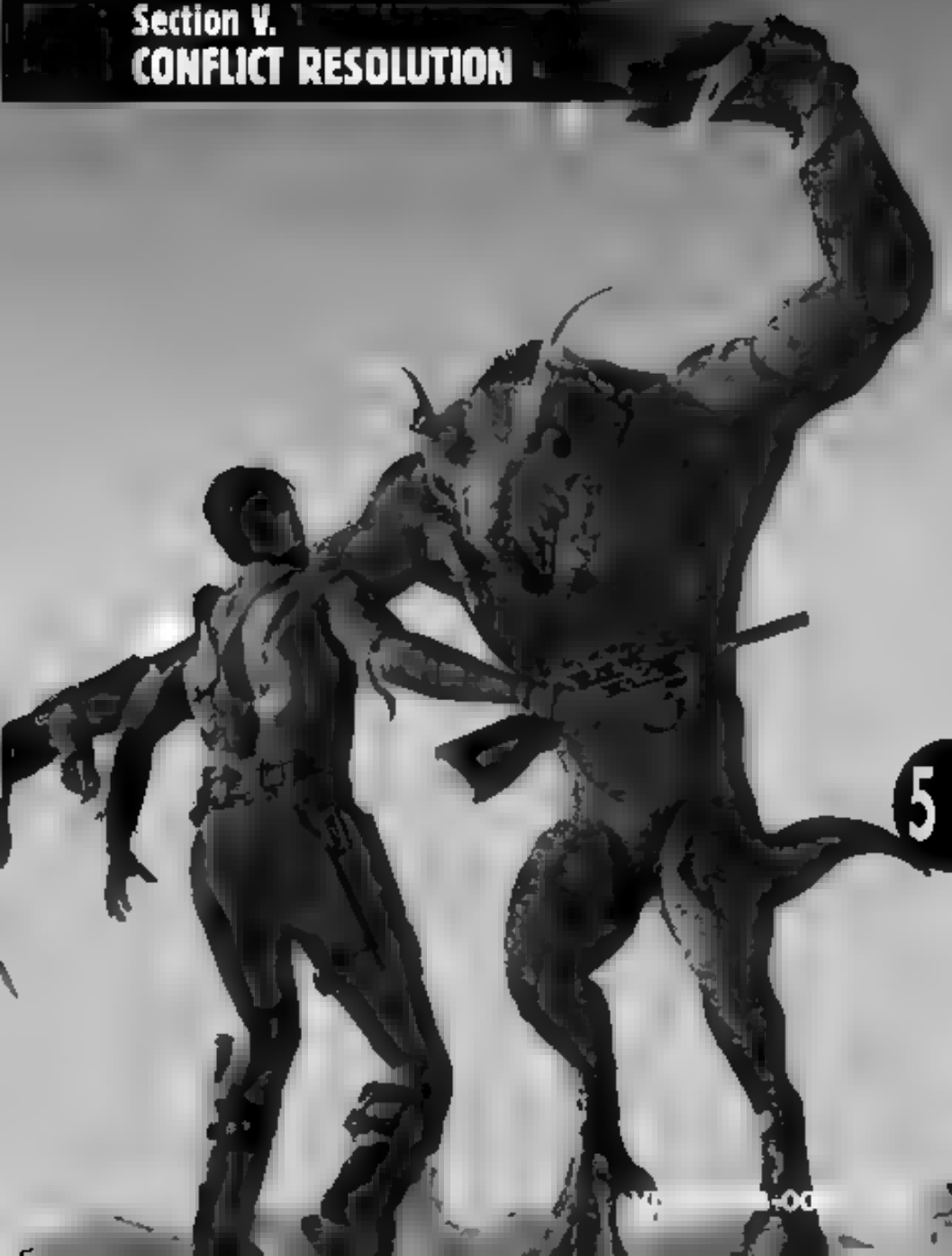
Brightness Level [SLIDER NORMAL -> BRIGHTER]

This preference will control the brightness of the screen. For some computers, and some monitors, you may need to turn the brightness level up a couple of notches to see darker screens better. There is a keyboard equivalent to make these changes on the fly.

Mouse Sensitivity [SLIDER SLOW -> NORMAL -> FASTER]

The higher the setting, the faster the mouse will move.

Section V. CONFLICT RESOLUTION

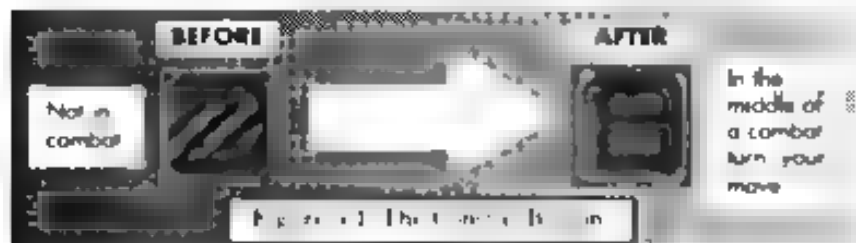


GENERAL

At some point during your adventure, diplomacy or stealth will fail. The last resort will be combat. Combat is defined when you have an attacker attempting to do damage to a defender. It requires two or more people to have a combat situation.

Combat in Fallout is turn based. Generally, you will get a chance to act. After your action or actions, the next character involved in combat gets to go. When all of your opponents or allies involved in this combat have taken their actions, then you get another chance to act. This is called a new turn. This continues until all the combatants are dead, unconscious or fleeing.

Since the rest of the game is real time, one minute of real world time equals one minute of game time, unless you perform an action that takes an extended amount of time, or use the PipBoy alarm clock to rest. When combat starts, you change modes to turn based. You will know when this happens when the combat buttons in the lower right hand corner of the interface bar are revealed.



When it is your turn, the lights around the combat button will glow bright green. During your opponents' turn, the lights are red. The action points above the active item button on the interface bar will also glow a bright green when it is your turn, red when it is your opponents' turn, and dull green when you are not in combat.

Each combat turn is roughly 5 seconds of game time. It may take longer in real time to finish, as you think about and then perform your actions for that turn.

Combat will often refer to hexes, short for hexagon, or a six-sided polygon. A hex is a way of dividing the area of the battlefield into small, manageable chunks. Each hex in Fallout is one meter from side to side. Someone two hexes away would be considered two meters away.

STARTING COMBAT

There are two ways to start combat: attack or be attacked. Combat will often result if you get too close to a hostile critter (like a mutated rat) or if you say something that really angers some sentient being (like a mutant that you called a rat).

If you want to attack someone with a weapon besides your hands and feet, you must first equip the weapon into one of the active item slots (ITEM 1 and ITEM 2 in the inventory screen). Left-click on a weapon with a valid attack type: single, burst, swing, thrust, throw - see below. The cursor will turn into the targeting cursor and you can then left-click on an opponent to start the combat. The turn-based combat system will take over until all of your opponents are dead, unconscious, or fleeing.



Figure 5-2 The interface bar in combat mode. Shown is the active item button with a weapon.

People will be ordered in the turn by their Sequence statistic. If more characters or monsters enter combat, they will also be placed by their Sequence number.

ACTIONS IN COMBAT

Once you are in a combat turn, you'll have a limited number of actions that you can perform. The number of actions is based on your Action Point stat. The more action points (AP) you have, the more things you can do. You will "spend" AP every turn, until you have just a few or none left, and then the next person in the combat turn will go.

Action Points. The number of action points your character has is located above the active item button on the interface bar. The AP lights only show the first 10 AP you have. If you have more than 10 AP remaining, they will not be shown.

As you take actions, and spend AP to do those actions, the number of bright green lights will turn dull green. The number of bright

green lights are your remaining AP

Different actions cost different amounts of APs. It costs very little to walk one meter, but to walk several meters costs more. Attacking with a knife is faster than aiming with a rifle, so the knife attack will cost less AP to perform.

Table 5-1 ACTION POINTS

ACTION TO PERFORM	BASE AP COST
Walking	1 AP per meter (hex)
Hand to Hand (Hit) Attack	3 AP
Melee Weapon Attack	4 AP *
Ranged Attack (Single)	5 AP *
Ranged Attack (Burst)	6 AP *
Targeted Attack	+1 AP *
Reloading Ammo	2 AP
Accessing Inventory	4 AP
Opening a door	3 AP
Using a scenery item	3 AP

*Some weapons cost more or less AP than listed to use. The number of AP to use an active item (like a weapon) is always shown in the lower left-hand corner of the active item button.

Movement. The number of AP points to move is shown in the middle of the movement cursor when you pause the cursor for a moment over the destination hex. If there is a red X in the center of the cursor, then you do not have enough AP to move that far, or there is something (or someone) blocking your access to that hex.

Running in combat has no advantage or penalty.

Reserve Movement. If you hold down the CTRL key while clicking to move, you will reserve enough action points to perform the current action for the active item. If you want enough AP left over to shoot your target, but you want to get as close to it as possible to get the best possible chance to hit, then hold down the CTRL key when you click to move. Example: You have 9 AP. Your current weapon is a Cost 6520. It costs 5 AP to shoot the gun. If you hold CTRL down when you click on a hex that is 8 hexes away, you will only move (9-5) 4 hexes towards the destination hex. You will have 5 AP remaining, just enough to shoot the pistol.

Attacking. The number of AP required to make an attack will depend on the attack that you make. Weapons that are big and bulky will require more AP to use than a smaller, more agile weapon.

All ranged weapon attacks are assumed to be aimed. Ammunition is scarce. Each shot must count.

Targeted shots require more aim time, so they take an additional AP to perform.

To attack, right-click on the active item button, also called an active weapon button when you have a weapon in it during combat, to get to the mode that you want to attack in. Left-click on the button to get a targeting cursor. Move the targeting cursor over your opponent, and left-click again to attack.

Inventory. If you press the INV button to access your inventory, it will cost you 4 AP to do so. If you do not have 4 AP, you cannot get to your inventory.

Once you are in your inventory, you can perform as many actions as you want. If you do nothing, it will still cost you the 4 AP. Once the AP are spent, you cannot get them back.

Other Actions. If you perform any odd actions, like opening or closing a door or using a computer, it will cost you 3 AP.

Some skills or actions require so much time to properly use that you cannot perform them in combat.

Armor Class Bonus. Any unused AP remaining when you end your turn will add to your armor class. Effectively, the less you do in a turn, the more defensive you are and the harder you are to hit. If you are trying to avoid an opponent, it will often be better to use the action points to move away from the opponent instead of standing still and getting the Armor Class bonus.

CHANCE TO HIT

Attacks in combat are not a sure thing. People are dodging, your heartbeat is racing, there is often cover or armor to stop the attack, and palms get a little sweaty. Weapon attacks will often refer to a "chance to hit." When you move the targeting cursor over your opponent, for example, you will get the chance to hit percentage when you hover the cursor for a moment. The higher this number is, the more likely you will actually be able to hit your opponent with the attack. This number is a percentage.

For example, if the chance to hit is 63%, then 63 out of 100 times, you should be able to succeed. A 50% chance to hit means that

half of the time you will hit, and half of the time you will miss.

Your chance to hit is based on the appropriate weapon skill and modified by the range, light level, armor, cover your target has, and if the attack is targeted, the location you are trying to hit.

Table 5-2 WEAPON SKILLS

SKILL	WEAPONS COVERED
Small Guns	Pistols, SMGs and Rifles
Big Guns	Heavy Machine-guns, Flamethrowers and other large support weapons
Energy Weapons	Ranged weapons that use power cells as their ammo type
Throwing	Thrown rocks, spears, knives and grenades
Melee Weapons	Knives, spears, sledgehammers and other hand to hand weapons
Unarmed	Punching and Kicking attacks

For ranged weapons, the distance between you and your target is critical. The closer you are to the target, the better the chance to hit. Your Perception will drastically modify the final to hit penalty or bonus for range. If you are closer than your Perception in meters (8 Perception is 7 meters or less, for example), you will actually get a bonus to your to hit chance. If the target is farther away than your Perception in meters (9 meters or more, according to our other example), then you will get a penalty on your to hit chance. If the target is exactly your Perception away from you, there is no modifier.

If your target is in the dark, they will be harder to see. Targets that are hard to see are also harder to hit. The light level of the target will therefore modify your chance to hit. If the target is in the shadows, there will be a penalty for attacking it. Partial darkness is a -10% to hit, medium darkness is a -20% to hit, and full darkness is a -40% to hit penalty. The light around your character represents

your ability to see closer objects better in the dark. It does not modify an opponent's chance to hit you in combat. Your opponents are subject to the standard darkness modifiers.

Armor provides protection against the target actually being hit by deflecting the attack. Attacks that are deflected or bounced, for really heavy armor, do no damage to the target. The percentage that the chance to hit is modified by is called Armor Class (AC). The AC is subtracted from the chance to hit. Higher ACs are therefore better. Anything over a 20% AC is really good. See the Armor section on page 5-12 for more details.

Cover is considered as any obstacle between you and your target. Other people, barrels to duck behind, trees, and walls are all considered cover. Cover will modify the to hit chance as a negative penalty. You will never have a better chance to hit your target if there is cover between you and it. The amount of the penalty depends on the cover. A barrel may be very little, another person a little more, and a wall may have a really big modifier.

Targeted attacks are discussed below, but they all have some sort of negative to hit penalty based on the location being targeted. Trying to hit someone in the eyes is more difficult than attacking their left arm, or tentacle, or whatever!

RANGED WEAPONS

Ranged weapons are weapons that can be used in a range of 1 hex or more. Ranged weapons have some sort of finite range that they can be used up to, but this is often 6-8, 15, 20 or more meters (hexes) away.

Pistols, rifles, SMGs, shotguns, rocket launchers, flame-throwers are all considered ranged weapons. So are throwing knives, spears and rocks. If you can attack someone at a range of more than 2 hexes, it is considered a ranged weapon.



Figure 5-3 The active item button, in Single attack mode

Single Shot. Some ranged weapons are single shot. That is, each attack will only use one round of ammunition or one instance of the weapon in the case of weapons which self-destruct, like a grenade, or physically leave your hand, like a throwing knife.

You will have a single chance to hit with a single shot weapon. If you succeed at your skill roll, after modifiers for range, light level, and the armor of the target, you will hit. If you fail the roll, you will miss.



Figure 5-4 The active item button in Burst attack mode

Burst. Burst weapons fire multiple rounds of ammunition with every attack. Burst weapons can have a varying rate of fire (ROF). The higher the ROF, the more shots the burst weapon will use per attack.

Burst weapons do have the advantage that you will get multiple chances to hit. Each shot has an individual chance to hit. Even with a low skill, a burst weapon with a high ROF will most likely mean that some of the shots will hit.

The other advantage that burst

weapons have is a larger area of effect. A burst weapon is capable of covering multiple hexes and hitting several targets at once. The higher the ROF, the more likely multiple targets will be hit during a burst attack. Your primary target (the person or thing you target) will take the brunt of the burst attack. Everyone between you and the target, within a cone that is centered on the target, can possibly be hit by the burst attack. Friends, enemies, and non-combatants. If they are in your way, there is a chance they could be hit.

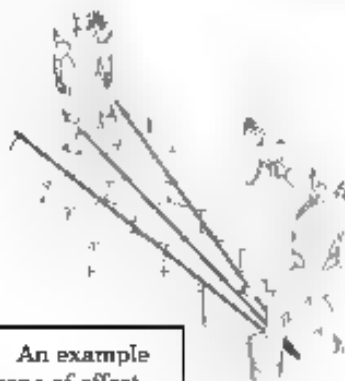


Figure 5-5 An example of a burst cone of effect

If you perform a burst attack on an enemy that is very close to you then you will saturate them with bullets instead of doing the wider, spraying affect

Bursting does have the unfortunate side effect of using a lot of ammo

Reloading. Weapons that have an ammo capacity (like a gun, but also including any weapons that have fuel or energy requirements) will need to be reloaded from time to time (more often if you attack more often, or if the weapon is a burst weapon with a high ROF)

Reloading can happen one of two ways: you can access inventory and drag the proper ammunition to the weapon to reload it, or you can do a reload action from the active item button on the interface bar. The first method is slower, but you get to choose the exact ammo loaded. The second method is a little faster, but if your gun is empty you get whatever type of ammo is readily available that will fit it.

The green ammo bar on the right side of the active item button will show the approximate number of rounds or energy remaining in the active weapon. Examine the weapon in inventory to get an exact count.

If you attempt to attack with an empty weapon, you will automatically fail.

Throw. Some weapons can be thrown. These weapons have a range based on your Strength. Characters with a higher Strength will be able to throw the ranged weapon farther.

Grenades are the most typically thrown weapon. They also have the nasty ability to detonate even if you miss. A live grenade has to land somewhere.

HAND TO HAND COMBAT

The use of melee weapons and unarmed combat is collectively known as Hand to Hand combat (HtH). This sort of combat occurs at very close ranges, from one to two hexes. Normally you will be adjacent to your opponent. This type of combat is fast and deadly, and very personal.

Melee weapons like knives and brass knuckles, have the advantage over ranged weapons in that they do not need consumable ammunition and they are generally faster to use accurately.

Hand to Hand combat has the disadvantage that your opponent will always be able to attack you back. With ranged weapons, you

can fire from a distance, and if your opponent is not armed with a ranged weapon, he must run up to you. HtH combat is a little more dangerous.

Swing. Most melee weapons can be used in one of two ways with Swing being the most typical attack. Swinging weapons have a base damage range, plus they get a bonus from your Strength. The Melee Damage stat will add to the base damage of the weapon. The higher the Melee Damage, the more damage you are assured of doing.

Thrust. Some melee weapons can also be Thrusted. Thrusting weapons also get the Melee Damage bonus. There is no practical difference between Swing and Thrust.

Punching & Kicking. If you are without a melee weapon, you can always punch and kick. This type of attack uses your Unarmed combat skill. Punching and Kicking attacks always do damage based on just your Melee Damage.

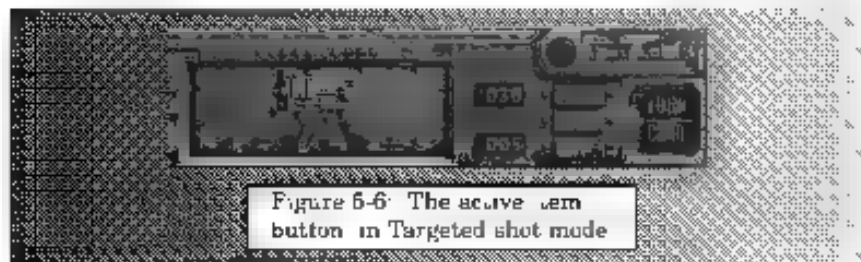
DAMAGE

Damage is the result of a successful combat attack. The more damage you do, the more likely your opponent will be killed, knocked unconscious, or otherwise put out of the fight.

Hit Points. Basic damage is recorded in Hit Points (HP). The more HP you have, the more damage you can take in combat. The more HP you do with an attack, the better that attack was.

When your HP reach zero (0), you die.

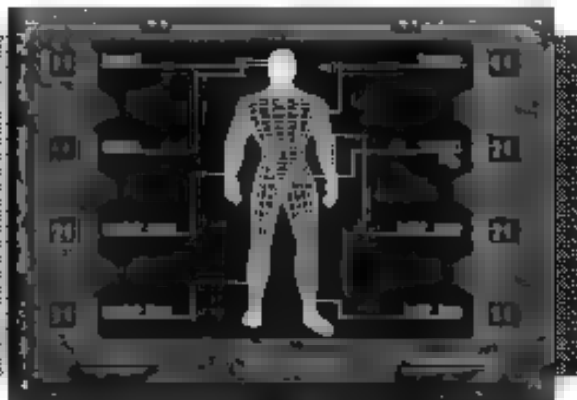
Targeted Shots. Targeted shots are attacks that are aimed at a specific location on your opponent. They are harder to do (resulting in a negative modifier to your chance to hit), but can potentially do much more damage and they are more likely to result in a critical hit (see page 5—11).



If a weapon is capable of making a targeted shot, it will have a different mode on the active weapon button. Right-click on the weapon in the active item button to cycle through the various modes. When you see the target in the lower right-hand corner then when you attack it will be a targeted shot.

Burst weapons or weapons that cause explosive damage cannot make targeted shots. Most melee weapons can make them. The target icon in the lower right-hand corner will always be displayed for weapons capable of targeted shots.

Figure 5-7 A targeted shot interface screen, showing the wireframe of your opponent



Once you have selected the targeted shot mode on the weapon, and the little target is in the lower right-hand corner you will get a red target cursor when you left-click on the active weapon button.

Left-click on a target, as if you were attacking them normally, and you will get a target shot selection screen, as shown in Figure 5-7. A wireframe will represent the target. The different areas that you can attack will be displayed on the left and right sides. The number next to the location is the final to hit chance that you have for attacking that specific location. To hit chances of "—" have no chance to hit.

Click on a location name to attempt the attack. Press the CANCEL button to cancel the attack in case the to hit chances were too low, for example.

Targeted shots have a higher chance of scoring a critical hit. The more difficult the location was to hit, the better the chance it will do a critical hit.

Critical Hits. Some attacks are just so good that they cause extra damage or have some nasty effect on your target. These are called critical hits. Your chance to have a critical hit is based on your critical chance and whether or not you made a targeted shot. Targeted shots will do more critical hits than normal shots.

A higher skill will give you a better chance to make a critical hit.

Some common critical hit effects:

Doing extra damage x1.5 x2. or even x3!

Crippling a limb with a targeted shot

Ignoring the armor of your target

Unconsciousness

Knocking the target over

Other effects are possible. The type of effects that will occur depend on the target.

Critical Failures. With every good thing must come a bad thing. Critical Failures are the opposite of the nice critical hits. Critical failures mean that something bad has happened to the attacker, which can include you.

Trying to make a difficult attack with a low to hit chance will increase the odds that you will have a critical failure. Taking the Jinxed trait means that everyone including yourself, will have more critical failures.

The type of critical failure that you have depends on the weapon (or lack thereof) you attack with.

Some common critical failure effects include

Running out of ammo

Jamming your gun

Losing AP

Dropping your weapon

Your weapon may explode only likely with explosives and energy weapons!

Missing your target and hitting someone else

There are other effects. Trial and error will take on a whole new meaning.

Poison. Poison is a nasty type of attack. It does damage over longer period of time. So instead of taking 4 points of damage from a knife, you could take 4 points of damage immediately from a poisoned knife, and then 10 points of damage over the next ten minutes. The more poison you are affected by, the longer you will take damage from poison.

Fortunately, poison runs out of steam. The poison will weaken over the same period of time. At first, you will take damage frequently from the poison. As time goes on, the period between damage will lengthen. Eventually, the poison will vanish.

If you can survive long enough, you can escape the clutches of evil poison.

Radiation. Radiation is an insidious invisible attack. Radiation causes damage to the cells of the target. Dangerous levels of Radiation are left behind in craters from nuclear bomb attacks, for example. Even after hundreds of years, dirty bombs can create hazardous radiation dangers.

The effect of Radiation is based on the total amount of rems, a count of the amount of radiation you have been exposed to. The higher your rem total, the more likely you are going to suffer ill effects.

A rem count of over 100 is dangerous.

If your rem count is over 1,000 it is most likely fatal.

Radiation will do damage to your hit points, and even to your statistics.

Normal armor does not stop radiation damage. Chems. such as Rad-X and RadAway can protect against the ill powers of radiation.

Unconsciousness. Some attacks, especially critical hits to the head, will cause unconsciousness. During this time, the person can do nothing. The amount of time the affected person will be knocked out is dependent on their Endurance. The higher their Endurance, the shorter they will remain unconscious.

Death. There are two ways to die: lose all your hit points or fall unconscious with remaining hostile creatures around you.

Both are bad ideas.

ARMOR

Fortunately, armor can protect against damage. Armor is a protective apparel worn to defend against attacks and damage. Better armor can protect against bigger attacks.

There are three factors that determine the quality of armor.

Armor Class. The first function of armor is to prevent the wearer from being hit by the attack. This is known as Armor Class or AC. The higher the AC, the better the armor. The AC subtracts from the to hit chance of the attacker. Example: you are wearing light leather armor with an AC of 15%. Your attacker has a base to

hit chance of 50% assuming all the other modifiers have been taken into account. His final to hit chance is only 50% - 15% = 35%.

Damage Threshold. The second step is blocking the damaging energy of the attack. This is known as the Damage Threshold (or DT). The DT is subtracted from the hit point damage of the attack. Example: Assume the above attacker succeeds. His attack does 20 points of damage. 'ouch!' You have a DT of 4. The first four points of his attack are stopped, with only 16 still 'ouch!' getting through the first phase of your armor.

Damage Resistance. After the DT, the Damage Resistance (or DR) of your armor takes over. This represents the ability of armor to slow down and disperse the damaging energy. DR is expressed as a percentage. This is the percent of the remaining damage that is nullified. Example: The 16 points from the above attack are still coming. You have a DR of 20%. The damage is reduced by $16 \times 2 = 3.2$ points of damage, round down, or 3 points. The final attack does only 13 points of damage, which is a heck of lot better than the initial 20 points.

Armor is always expressed as: Armor Class, DT/DR.



Don't let this happen to you! Proper weapon maintenance will stop over 85% of all critical failures!

ENDING COMBAT

At some point combat must end. Hopefully, you will be on the victorious side. If all the combatants on one side are dead, unconscious, or have fled, the combat will end.

If there are no more hostile creatures remaining, combat will end automatically at the end of your turn. If you want to end combat early, try the END COMBAT button on the interface bar.

If hostile creatures are nearby, you cannot end combat.

EQUIPMENT

Vault-13 comes prepared with the latest in survival equipment. The items in your storage containers will last 1,000 people over 10 years in comfortable and modern surroundings. When it is time to leave the Vault, and return to rebuild America, your friends at Vault-Tec have provided you with everything that you will need.

~~We have provided that all of your equipment is ready to go.~~

Yeah right. Who wrote this? What budget did they get? We already used most of the equipment on failed attempts to contact an outside civilization. And we've been in here a lot longer than ten years. We have the left to give you, but we will give you what we can.

A reminder: You can only carry an amount of equipment equal to your carry weight. Anything over that amount must be left behind.

You can get specific information about the items in your inventory by doing an Examine on a item in your inventory list. The information will be displayed in the inventory display window. If you equip armor and weapons, the character information in the display window will give you additional information.

There are six different types of equipment:

Weapons things that hurt people

Ammo things that go in things that hurt people

Armor things that help people not get hurt)

Containers things that hold other things,

Chems (things that you take)

Miscellaneous things that do other stuff)

All items have the following in common:

Weight how much things weigh in pounds. The weight of the item will affect your ability to carry equipment. You can carry a larger amount of lighter items than heavier items. When you examine an item, it will tell you the weight for one instance of that item. If you carry multiple items of the same type, you need to multiply the number of items by the weight to determine the total weight of items in that stack.





Size (how big or small things are) The size of the item will affect how many items a container can hold, and how difficult it will be for someone to steal this item from you. Larger items are more difficult to steal. Generally, items that are heavy, are larger in size. This is not always the case.

Cost how much things are worth, in money. More valuable items are worth more money. We don't know what kind of monetary system will exist after a nuclear war, but bartering is most likely to exist. In this case, items necessary to survival will probably carry a larger price tag than fancy, expensive, but unnecessary items.

Your bartering skill will adjust the value of an item.

EQUIPMENT LIST






WEAPONS

ICON	DESCRIPTION
	BRASS KNUCKLES Brass Knuckles are a melee weapon that use your unarmed skill. They will help in hand-to-hand combat when punching. Besides giving your hand a little more protection, they will increase the amount of damage you do with a punch. And they look cool.
	BATON This police baton will help subdue your opponents. You can swing or thrust it, as you desire. The baton will focus your strength, doing more damage than your own hands. Not much more, but more.
	PISTOL This is your basic ranged weapon. The 10mm round packs a goodly punch, and the Colt pistol is a fine example of workmanship and quality. It is a single shot weapon only, meaning that every time you pull the trigger you will fire one, and only one, round of ammunition. The 6520 has no problem feeding hollowpoint ammunition for small game hunting, or armor piercing rounds for larger, bipedal game.
	RIFLE A longer ranged, and more powerful, firearm. The Rangemaster is your basic, solid rifle. It uses the .223 caliber rifle round, a standard for over 110 years. The .223 combined with a 10" twist, gives good accuracy at range and solid knockdown capability.

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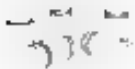

EQUIPMENT LIST

WEAPONS continued



ICON	DESCRIPTION
	<p>GRENADE</p> <p>The fragmentation grenade is extremely useful as a defensive weapon. A small, but concentrated, explosive charge connected to a contact fuze will spread over 1 000 metal fragments over a 2.5 meter radius area. The small explosion area means that these grenades can be used at a closer range than ever before, without possible harm to the user.</p>
	<p>SMG</p> <p>One of the finest weapons in the world. The H&K MP9 is a solid submachinegun, capable of single or burst mode attacks. The single shot is acceptable, comparable to the 6520 pistol, but the burst mode is spectacular. The MP9 is easy to control, and spews 10mm death like no other firearm in it's size category.</p>
	<p>KNIFE</p> <p>Vault-Tec knives are formed from the hardest steel alloys known to man. The knife is a superb tool, capable of performing many mundane tasks, as well as being a good melee weapon. The knife point and edge will act as a force multiplier, increasing the amount of damage your Strength can do. Not as good as a gun, but better than most other small melee weapons. This knife is not balanced or designed for throwing, as some others are.</p>
	<p>SLEDGEHAMMER</p> <p>While many would consider a Sledgehammer to be an excellent tool, but a poor self-defense weapon, the latest designs are made with lightweight but extremely strong materials. The sledgehammer is a massive weapon, that in the hands of a strong welder, can knock foes off their feet.</p>
	<p>SPEAR</p> <p>A razor-tipped spear can be thrown for several meters (more depending on your strength), or used in hand-to-hand combat, making this a good balance between ranged and melee weapons. While it is not the best tactical sense to throw your only weapon at your opponent, if you keep a sidearm or other small weapon readily available, the spear can be a good first attack.</p>

EQUIPMENT LIST

AMMO


ICON	DESCRIPTION
	223 FMJ Rifle caliber ammunition. The FMJ stands for Full-Metal Jacket which describes the bullet that is used in the round of ammo. A FMJ bullet is very tough, and has pretty good penetration without sacrificing good expansion. In other words, it's an average round.
	10mm AP The 10mm caliber ammo is designed for pistol or submachinegun size firearms. The AP suffix denotes the round is Armor Piercing. AP rounds have excellent penetration, but poor expansion. They will not be as affected by armor as a normal round, but do less damage after armor to the target.
	10mm JHP This is another version of the 10mm, but in JHP or Jacketed Hollow Point. Hollow Point ammunition is designed to expand to as large of a size as possible to translate the most energy to the target. Unfortunately, if the target is wearing armor, most of the energy is splatted against the armor and little of it will actually affect the target.

ARMOR


	COMBAT ARMOR Combat Armor is advanced personal armor for the 22nd century police officer or military grunt. This is about the best armor a Vault Dweller is likely to see in their lifetime. Combat Armor is highly effective against most types of damage, is light weight (for it's protective value) and is, unfortunately, not available without a special permit. Interested parties should contact the BADTFL office near them.
	LEATHER ARMOR The original Leather Armor was designed for Motorcycle Football and other dangerous contact sports. It is likely that the simple construction techniques required to produce armor of this design will make it a popular choice following a nuclear disaster. It provides moderate protection, and the light construction makes it easier to dodge attacks while worn. Unfortunately, it provides little to no protection against explosions or plasma attacks.

EQUIPMENT LIST


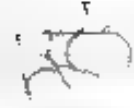
ARMOR continued

ICON	DESCRIPTION
	<p>LEATHER JACKET</p> <p>What's the point of wearing armor if you can't look good? The Leather Jacket is a toned down version of Leather Armor providing minimal protection while not sacrificing any dodging capability. Stylish, too. Unfortunately, poor ventilation and the black leather make this a very hot armor to wear under the scorching desert sun.</p>

CONTAINERS



	<p>BACKPACK</p> <p>A backpack will store items for you in one convenient location. Items have two features: size and weight. A backpack will store any number of items that total less than around 40 lbs. and have a combined size that will fit in the backpack. Several really large items (like suits of armor) will not fit in a normal backpack, but lots of small items (like ammo, or grenades) will fit just fine.</p> <p>Why use a backpack? To keep your inventory organized.</p>
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CHEMS




	<p>RAD-AWAY</p> <p>If you have been exposed to large amounts of radiation, then use RadAway to remove the radiation from your system. It won't feel good, but better a headache and some stomach problems for a couple of days than the long term effects of nuclear radiation! RadAway takes a little while to work.</p>
	<p>RAD-X</p> <p>Rad-X is a preventive medication. Take Rad-X before exposure to radiation, and the total amount of radiation you receive will be reduced. Rad-X bolsters your body's own Radiation Resistance. The stronger you are to start with, the more effective Rad-X will be.</p>

EQUIPMENT LIST

CHEMS continued

ICON	DESCRIPTION
	STIMPAK A stimpak (short for Stimulation Delivery Package) contains many healing chems. A soup of healing medication, if you will. By injecting the Stimpak, you drastically increase your own recuperative functions and restore lost hit points almost instantly.
	SUPER STIMPAK The Super Stimpak contains more drastic chems, increasing the healing effect at the cost of eventual damage to the very tissue it heals. A larger cousin to the Stimpak, the Super Stim will heal more damage. It will, however, cause a small amount of hit point loss after a period of time. You should be aware of this function, and prepare for it. But nothing works like a Super Stim when time is short, and danger grave.




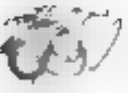

MISCELLANEOUS

	DOCTOR'S BAG A Doctor's Bag includes all the items necessary to perform most tasks required by the Doctor skill. Using this item will automatically perform the Doctor skill task, but at a higher percentage chance of success (the proper tools help ensure a higher success rate). A Doctor's Bag does not contain unlimited supplies and will eventually run out.
	DYNAMITE An explosive. Use the dynamite to set the timer. After the timer expires, the dynamite will explode. Your Traps skill will determine if you set the timer properly. In Fallout, explosives are generally lower powered than you would expect. But don't stand next to a charge of dynamite when it goes off.
	FIRST AID KIT Similar in nature to the Doctor's Bag, the first aid kit (FAK) has items for the use of the first aid skill. Using the FAK on a hurt subject will improve the successful chance of using the skill of First Aid. Also, like the Bag, the FAK contains a limited amount of healing items, bandages, and so on. After multiple uses, it will be eliminated.

5

EQUIPMENT LIST

MISCELLANEOUS continued

ICON	DESCRIPTION
	<p>FLARE</p> <p>The flare can be used to create a field of light for a period of time. Only really useable during the night or in darkness conditions, the flare can be a successful tool in exploration. Light makes it easier to see people and things.</p>
	<p>GEIGER COUNTER</p> <p>A geiger counter is a device for the measurement of radiation. If you place the counter in one of your active item slots, you will have advance warning about radiation. Actively using the counter will give you important detailed information about your personal radiation count.</p>
	<p>LOCKPICKS</p> <p>An unauthorized item for general vault personnel use. Lockpicks are only to be used in emergencies requiring the opening of doors or locked containers when the proper key is unavailable. The proper use of the lockpick item will increase the successful chance of using the lockpick skill.</p>
	<p>MOTION SENSOR</p> <p>When used in conjunction with the PIPBoy 2000 AutoMap feature, the motion sensor will display living and moving critters on the map. The motion sensor must be placed in an active item slot to function correctly. Use the motion sensor to scout the area ahead.</p>
	<p>THT TAPES (Holotapes)</p> <p>THT Tapes can store an incredible amount of data: some can hold as much as 256k. The standard tape holds 64k, with the middle model holding an average of 128k, barring any bad inches of tape. THT Tapes are based on Tape Holography technology, storing their information safely for extended periods of time. Use the THT Tape to add it's information to a compatible reader in your case: the PIPBoy 2000.</p>

EXPERIENCE

As your character survives in the hostile environments, and succeeds at the tasks ahead, you will gain experience. In turn, experience will improve your character, increase your character level, allowing you to spend points on skills, and eventually pick a Perk.

Experience is rated in Experience Points (often abbreviated XP). The more difficult the task you solve, or the more difficult the critter you put down, the more experience points you earn.

When you achieve a set number of XP, you gain a level. When you gain a character level, which is a generalized measure of how much experience you have gained and how capable your character is, you gain the following:

Additional Hit Points, equal to 1/3 Endurance

More Skill Points, equal to 5 + Intelligence x 2

(see page 5—22)

Every three levels, you gain one Perk (see page 5—23)

The maximum level a character can achieve is level 21. Here is a list of the levels, and how much XP is required to gain that level.

Table 5-2 EXPERIENCE TABLE

LEVEL	XP REQUIRED	TITLE
1	0	Vault-dweller
2	1,000	Vault Scout
3	3,000	Vault Veteran
4	6,000	Vault Elite
5	10,000	Wanderer
6	15,000	Desert Wanderer
7	21,000	Wanderer of the Wastes
8	28,000	Elite Wanderer
9	36,000	Strider
10	45,000	Desert Strider
	55,000	Strider of the Wastes

Table 5-3 EXPERIENCE TABLE Continued

LEVEL	XP REQUIRED	TITLE
12	66,000	Strider Elite
13	78,000	Vault Hero
14	90,000	Wandering Hero
15	105,000	Striding Hero
16	20,000	Hero of the Desert
17	36,000	Hero of the Wastes
18	53,000	Hero of the Glowing Lands
19	171,000	Paragon
20	90,000	Living Legend
21	210,000	Last Best Hope of Humanity

As you can see, it takes a slightly larger amount of XP to advance from the lower levels to the higher levels. You have to learn more to achieve the same amount of growth.

SKILL POINTS

When you earn more skill points, you can increase your skills by spending those points on a skill. Every skill point is worth an additional +1% to a normal skill, and +2% to a Tag skill.

You can spend skill points whenever you wish, and on whatever skill you want to increase. Storing skill points is a possible strategy, but then you effectively lose them by not gaining their benefit until you spend them.

You earn skill points by going up a level. When you go from level 1 to level 2, you will gain some skill points. The number of skill points you gain depends on your character. Every level will get you $5 + \text{Intelligence} \times 2$ skill points. Average characters will gain 15 skill points a level, or +15% to normal skills or +30% to just Tag skills, or some combination between the two types of skills.

To spend skill points, go to the character screen. The number of skill points is listed above the information card.

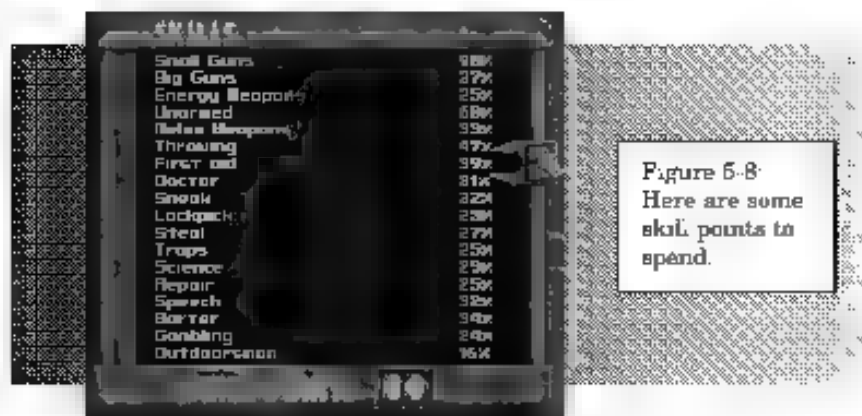


Figure 5-8:
Here are some
skill points to
spend.

Click on the skill name of the skill you want to spend some points on. The skill will highlight, and the pointer on the right-hand side of the skill column will jump to the skill level. You can spend points by clicking on the plus sign on the pointer. If you change your mind, and spend too many points, you can click on the minus sign (but you can't reduce your skill below the point where you started spending skill points, naturally). Until you actually hit the DONE button and return to the game, you can make as many adjustments as you wish. If you click on the CANCEL button, it will restore your character to the state you were in before making any changes.

You can spend as many skill points as you have in the skill point pool. Once you are out, you won't get any more skill points until you get another level.

The maximum skill level is 200%. If you have 200% in a skill, you cannot add more points to that skill.

PERKS

Besides skills, it is possible for experience to reward you in another manner - Perks. You get one Perk every three levels (level 3, 6, 9, 12, 15, 18, and 21, unless you have the Skilled trait, every four levels: level 4, 8, 12, 16, and 20). A Perk is a new ability. Perks are based on your character and the list of Perks that you can choose from is based on what level statistics, and skills your character has.

You will have the opportunity to pick a Perk when you enter the character screen after achieving a level that grants you a Perk. You can choose not to pick a Perk, but if you don't select one before the next Perk-granting level, you lose it.

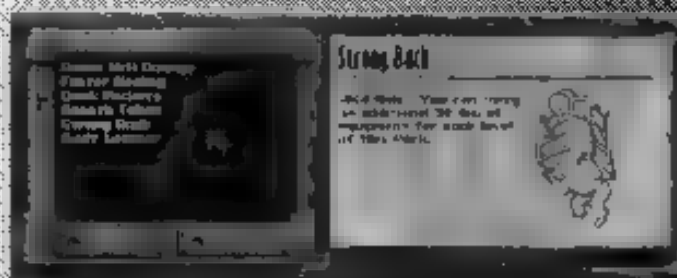


Figure 5-9: Picking a Perk for a better future!

Some Perks can be taken multiple times. These Perks have ranks, or perk levels. Every additional rank will increase the power of the Perk.

Perks also have requirements. Your character must have the minimum requirements, or greater, to be able to take the Perk. You must meet all the requirements. Some Perks have no requirements.

All Perks are not available at the first level. Perks are offered. These Perks have a minimum level before they can be taken.

THE LIST OF PERKS

Action Boy

Each level of Action Boy (insert Girl, if you wish) will give you an additional AP to spend every combat turn. You can use these general APs on any task.

Number of Ranks	3
Requirements	5 Agility, Level 12

Animal Friend

Animals will not attack one of their friends, unless the animal is threatened or attacked first. Exactly what an animal is in this world is open to debate.

Number of Ranks	1
Requirements	5 Intelligence, 25% Outdoorsman, Level 9

Awareness

You are more likely to notice details. Buying one level of Awareness will give more detailed information when you perform an Examine. Each level of Awareness will add to your Perception for purposes of Examine.

Number of Ranks	3
Requirements	5 Perception, Level 3

Better Criticals

The critical hits you cause in combat are more devastating. You gain a 20% bonus on the critical hit table, almost ensuring that more damage will be done. This does not affect the chance to cause a critical hit.

Number of Ranks	1
Requirements	6 Perception, 6 Luck, 4 Agility, Level 9

Bonus HtH Attacks

You have learned the secret arts of the East, or you just punch faster. In any case, your hand-to-hand attacks cost 1 AP less to perform.

Number of Ranks	1
Requirements	6 Agility, Level 6

Bonus HtH Damage

Experience in unarmed combat has given you the edge when it comes to damage. You cause +2 points of damage with punches and kicks for each level of this Perk.

Number of Ranks	.3
Requirements	6 Agility, 6 Strength, Level 3

Bonus Move

For each level of Bonus Move, you get 2 free APs each turn that can only be used for movement. In other words, you can move 2 free hexes each turn for each level of this Perk.

Number of Ranks	.3
Requirements	5 Agility, Level 6

Bonus Ranged Damage

Your training in firearms and other ranged weapons has made you more deadly in ranged combat. For each level of this Perk, you do +2 points of damage with ranged weapons.

Number of Ranks 2

Requirements 6 Agility, 6 Luck, Level 6

Bonus Rate of Fire

This Perk allows you to pull the trigger a little more faster, and still remain as accurate as before. Each ranged weapon attack costs 1 AP less to perform.

Number of Ranks 1

Requirements 7 Agility, 6 Intelligence, 4 Perception, Level 9

Cult of Personality

Your reputation is always positive to people. Without this Perk, a large negative reputation would have a bad effect on good natured people. Works with a good rep and bad people, too.

Number of Ranks 1

Requirements 10 Charisma, Level 12

Dodger

You are less likely to be hit in combat. If you have this Perk, Every level will add +5% to your Armor Class, in addition to the AC bonus from any worn armor.

Number of Ranks 2

Requirements 4 Agility, Level 9

Earlier Sequence

You are more likely to move before your opponents in combat, since your Sequence is +2 for each level of this Perk.

Number of Ranks 3

Requirements 6 Perception, Level 3

Educated

Each level of Educated will add +2 skill points when you gain a new experience level. This Perk works best when purchased early in your adventure.

Number of Ranks 3

Requirements 6 Intelligence, Level 6

Empathy

You have studied other human beings, giving you the inside knowledge of their emotional reaction to you. You will see the reaction level of the person you are talking to, when involved in an in-depth conversation.

Number of Ranks . 1

Requirements 7 Perception, 5 Intelligence, Level 6

Explorer

The mark of the Explorer is to search out new and interesting locations. With this Perk, you have a greater chance of finding special places or peoples.

Number of Ranks . 1

Requirement None, Level 9

Faster Healing

With each level of this Perk you will get a +1 bonus to your Healing Rate. Thus you heal faster.

Number of Ranks .3

Requirements 6 Endurance, Level 3

Flower Child

With this Perk you are much less likely to be addicted to chems (50% less likely, actually), and you suffer half the withdrawal time of a normal person.

Number of Ranks . 1

Requirements 5 Endurance, Level 9

Fortune Finder

You have the talent of finding money. You will find additional money in random encounters in the desert.

Number of Ranks . 1

Requirements 8 Luck, Level 6

Friendly Foe

Characters that are part of your team are highlighted green in combat instead of red. If you have this Perk, Red highlighted characters may still be non-hostile towards you.

Number of Ranks . 1

Requirements 4 Perception, Level 6

Ghost

When the sun goes down, or you are in a poorly lit area, you move like a Ghost with this Perk. Your Sneak skill is enhanced +20% during darkness conditions.

Number of Ranks	1
Requirements	60% Sneak, Level 6

Healer

The healing of bodies comes easier to you with this Perk. Each level will add 2-5 more hit points healed when using the First Aid or Doctor skills.

Number of Ranks	3
Requirements	7 Perception, 6 Agility, 5 Intelligence, 40% First Aid, Level 3

Heave Ho!

Each level of the Heave Ho. Perk will give your thrown weapons an additional +2 Strength for purposes of determining range only.

Number of Ranks	3
Requirements	Level 6

Lifegiver

With each level of this Perk, you gain an additional 4 Hit Points. This may not seem like a lot, but every little bit helps.

Number of Ranks	3
Requirements	4 Endurance, Level 12

Master Thief

A Master Thief has a one-time bonus of +10% to the Sneak, Lockpick, Steal, and Traps skills. Rob from the rich, and give to you.

Number of Ranks	1
Requirements	Level 12

Master Trader

You have mastered one aspect of bartering - the ability to buy goods far cheaper than a normal person. With this Perk, you get a 25% discount when purchasing items from a store or another trader.

Number of Ranks	1
Requirements	7 Charisma, 60% Barter, Level 9

Medic

The Medic Perk will give you a one-time bonus of +20% to the First Aid and Doctor skills. Healing skills are a good thing.

Number of Ranks 1
Requirements Level 12

Mental Block

Mental Block is the ability to tune out any outside mental interference. You must have learned this talent from a passing guru, or from a really late night at a bar.

Number of Ranks 1
Requirements Level 15

More Criticals

You are more likely to cause Critical Hits in combat if you have this Perk. Each level of More Criticals will get you a +5% chance to cause a critical hit. This is a good thing.

Number of Ranks 3
Requirements 6 Luck, Level 6

Mr. Fixit

This Perk will give you a one-time bonus of +20% to the Repair and Science skills. A little late night cramming never hurt anybody, especially you.

Number of Ranks 1
Requirements None, Level 12

Mutate!

The radiation of the wasteland has changed you. One of your Traits has mutated into something else.

Number of Ranks 1
Requirements Level 9

Mysterious Stranger

With this Perk, you have gained the attention of a Mysterious Stranger, who will appear to help you from time to time. If your ally is lost in combat, do not expect him or her to be replaced.

Number of Ranks 1
Requirements 7 Luck, Level 6

Night Vision

With the Night Vision Perk you can see in the dark better. Each level of this Perk will reduce the overall darkness level by 10%.

Number of Ranks	3
Requirements	6 Perception, Level 3

Pathfinder

The Pathfinder is better able to find the shortest route. With this Perk, your travel time on the World Map is reduced by 25% for each level.

Number of Ranks	2
Requirements	6 Endurance, 40% Outdoorsman, Level 6

Pickpocket

You are much more adept at Stealing than the normal crook. You can Steal with the best of them, because with this Perk, you ignore size and facing modifiers, when stealing from a person.

Number of Ranks	1
Requirements	8 Agility, 80% Steal, Level 9

Presence

You command attention by just walking into a room. The initial reaction of another person is improved by 10% for each level of this Perk.

Number of Ranks	3
Requirements	6 Charisma, Level 3

Quick Pockets

You have learned to better store your equipment on your person. With each level of this Perk, the AP cost to access Inventory in combat is reduced by one.

Number of Ranks	3
Requirements	5 Agility, Level 3

Rad Resistance

You are better able to avoid radiation, and the bad effects radiation causes. Each level of this Perk will improve your Radiation Resistance by 10%.

Number of Ranks	3
Requirements	6 Endurance, 4 Intelligence, Level 6

Ranger

You are better able to avoid unwanted attention while traveling through the waste, and Your chance of a hostile random encounter is lowered by each level of this Perk

Number of Ranks	3
Requirements	6 Perception, Level 6

Scent

You have improved your ability to see distant locations, increasing the size of explorations on the World Map by one square in each direction

Number of Ranks	1
Requirements	8 Perception, Level 3

Scrounger

You can find more ammo than the normal, post-holocaust survivor. This Perk will double the amount of ammo found in random encounters

Number of Ranks	1
Requirements	8 Luck, Level 9

Sharpshooter

The talent of hitting things at longer distances. You get a +2 bonus, for each level of this Perk, to Perception for the purposes of determining range modifiers. It's easier than ever to kill at long range

Number of Ranks	2
Requirements	7 Perception, 6 Intelligence, Level 6

Silent Death

While Sneaking, if you hit a critter in the back, you will cause double damage using a HtH attack. Silent Death is that kind of Perk

Number of Ranks	1
Requirements	10 Agility, 80% Sneak, Level 18

Silent Running

With this Perk, you now have the ability to move quickly and still remain quiet. You can Sneak, and run at the same time. Without this Perk, you would automatically stop Sneaking if you ran

Number of Ranks	1
Requirements	6 Agility, 50% Sneak, Level 6

Slayer

The Slayer walks the earth! In hand-to-hand combat, all of your hits are upgraded to critical hits - causing destruction and mayhem

Number of Ranks 1

Requirements 8 Agility, 8 Strength, 80% Unarmed, Level 18

Smooth Talker

A Smooth Talker has learned to increase their options in dialogue, without understanding what they are talking about. Each level of this Perk will increase your Intelligence by one, for purposes of dialogue only.

Number of Ranks 3

Requirements 4 Intelligence, Level 3

Snakeater

Yum! Tastes like chicken. You have gained an immunity to poison, resulting in a +25% to your Poison Resistance.

Number of Ranks 1

Requirements 3 Endurance, Level 6

Sniper

You have mastered the firearm as a source of pain. With this Perk, any successful hit in combat with a ranged weapon will be upgraded to a critical hit if you also make a Luck roll.

Number of Ranks 1

Requirements 8 Agility, 8 Perception, 80% Small Guns, Level 18

Speaker

Being a Speaker means that you have a one-time bonus of +20% to the Speech and Barter skills. From the mouth of babes and all that.

Number of Ranks 1

Requirements None, Level 12

Strong Back

AKA Mule. You can carry an additional 50 lbs. of equipment for each level of this Perk.

Number of Ranks 3

Requirements 6 Strength, 6 Endurance, Level 3

Survivalist

You are a master of the outdoors. This Perk confers the ability to survive in hostile environments. You get a +20% bonus to Outdoorsman for survival purposes, for each level of this Perk.

Number of Ranks .3

Requirements 6 Endurance 6 Intelligence
40% Outdoorsman, Level 3

Swift Learner

You are indeed a Swift Learner with this Perk, as each level will give you an additional +5% bonus whenever you earn experience points. Best purchased at an early level.

Number of Ranks .3

Requirements 4 Intelligence, Level 3

Tag!

Your skills have improved to the point where you can pick an additional Tag Skill, increasing that skill by +20% immediately and 2% per skill point spent.

Number of Ranks 1

Requirements Level 12

Toughness

When you are tough, you take less damage. Each level of this Perk will add +10% to your general damage resistance.

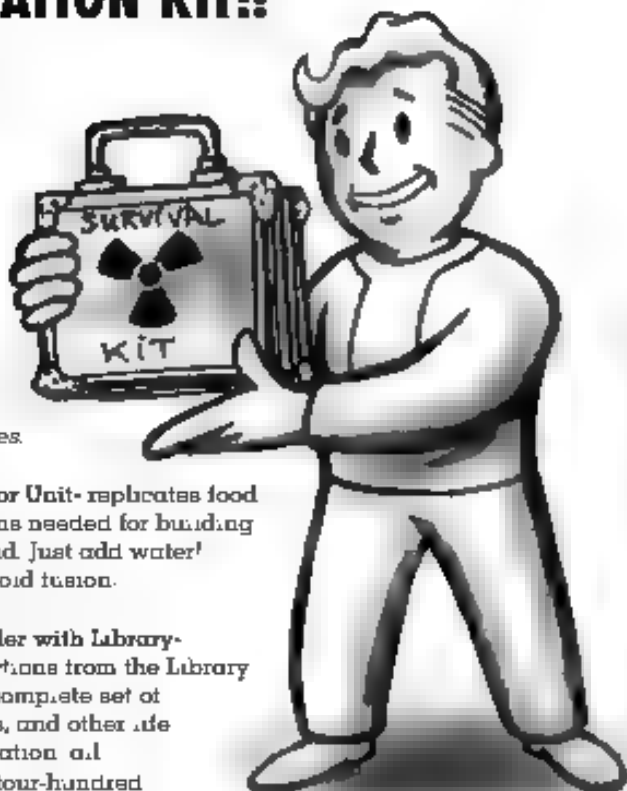
Number of Ranks .3

Requirements 6 Endurance 6 Luck, Level 3

Future-Tec a division of Vault-Tec presents the following advertisement for your enjoyment!

When the All Clear sounds on your radio, you don't want to be caught without...

THE GARDEN OF EDEN CREATION KIT!!



The kit includes:

Base Replicator Unit• replicates food and basic items needed for building your new world. Just add water!
powered by cold fusion.

Holodisc Reader with Library• includes selections from the Library of Congress, complete set of encyclopedias, and other life saving information all contained on four-hundred and sixty handy holodiscs!¹

and

A Miniature Pen Flashlight!²

4 out of 5 nuclear scientists recommend the Garden of Eden Creation Kit over the other leading survival kits!

A condensed version is available on three handy holodiscs.

²Not suitable for children under the age of three. A different toy is available for younger children.

RESTRICTED

APPENDICES



RESTRICTED

VDSG VTB-001-13-A

APPENDIX 1: HINTS & TIPS

Here are some hints and tips to help you in your quest to save Vault-13. Warning! There are some spoilers in the list below. If you don't want to spoil any part of the Fallout adventure, don't read. Most of the tips are general hints that will be familiar to experienced adventurers.

Strip Them Out

When you start out, remember to equip your character with the best possible equipment as soon as possible. Strip your fallen foes, barter the loot away and steal if you think you can get away with it, and are willing to live with the consequences of your actions.

Save Often

You have ten save game slots. Use them well. Before you get to a new location, save your game. Before entering a dangerous looking building, save your game. Before talking to an important looking NPC, save your game. And use all of your save game slots. Don't keep saving over slot 1. If something goes drastically wrong, it's better to be able to move a couple of saved games back and restore from there instead of having to start over from the very beginning.

Be Nice to People

More often than not, a good reaction will help you. That's not to say that going the route of a heavy, or kicking some poor loser into the dirt won't help, but a few kind words and deeds will help you out in the long run.

Punch People in the Nose

If you can't get your way, then learn how to force your opinion down their throat, with a 10mm if necessary. Words are nice, but you don't have a whole lot of time, and it might be easier to be the bad guy occasionally to get what you want. A little badness every now and then won't hurt you too much.

Time!

Remember that you are on the clock. The Vault is dying of thirst, and they have entrusted you with their lives. Don't let them down. Solving the water-chip adventure sooner rather than later will

Let you explore more easily and without as much pressure. Don't spend too much time diddling around. The Fallout world is advancing. Your actions will change the course the world will follow but the world will continue to move ahead without you.

Save! Save! Save!

Did we mention to save your game? Fallout combat is deadly. Getting shot in the eye is no fun, and many Fallout combats will result in painful injuries. Can you afford to restart from an old saved game and make up lost ground? No! Save your game.

Where do I go from here?

If you are having a lot of difficulty determining what to do next, follow these steps:

- a) Talk to people - many people will give you clues to new locations or places to go.
- (b) Explore the world - the Fallout world is southern California, so go to where there is a city and look for it on the world map. Also make sure to stop at every green-circle area - that means it is an important location. The extra distance you can see as you travel will give you a better chance of finding these locations.
- c) The Overseer - if you are completely stuck, try going back to the Overseer, he might have new information for you. Save your game where you are at, there is that Save word again, and then make the long journey back to the Vault. Talk to the Overseer. If the trip was for nothing, restore your previously saved game and look elsewhere. That way you don't waste any time.

Specialize

For the first couple of levels, spend your skill points in two or three skills. Master a small set of skills before attempting to master them all. Spend your skill points as soon as you gain a level. When you create a character try to make it a theme character. A thief, a diplomat and a warrior were the three themes we chose; can you think of any others? Pick Tag skills that will give you an advantage. If you know that you are going to spend a lot of skill points for a particular skill, make that skill a Tag skill. The 2% for every 1 skill point is a major advantage.



After about level 4 or 5, be sure to spread those skill points out a little bit more. All the skills are important in their own ways. Obviously, if you are a combat oriented character the weapon skills will be of great importance. Don't forget the other skills, however! Speech is critical, as is Science. Sneak will help when you can't overcome the odds.

Use the Save Game feature

Hmmm, we mentioned this before, didn't we?

Avoid the Crazy Chicken

You probably realize that you can interrupt your character in mid-step by simply clicking the left mouse button with the hex cursor in a new spot. This will make your character immediately move towards the new location. Now, if you repeatedly interrupt your character during a walk, you will do something very similar to the Crazy Chicken. It is childish. Don't do it. We beg you.

A

APPENDIX 2: CREDITS

PRODUCTION

Producer Tim Cain
Assistant Producer Fred Hatch
Division Director Feergus Irquhart
Asst Division Director Jeremy Barnes
Original Producer Tom Decker
Production Assistant Jason G. Suen
Monkey Boy Mike "Paco" Greene
Mac Assistance Chris Benson

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Lead Artists Jason Anderson
 Leonard Boyarsky
 Gary Halner
Artists Robert Collier
 Michael Dean

Trammell Ray Isaac
 Eddie Rainwater
 Scott Rodenhizer
 Sharon Shelman
Additional Art By Peter Kroka
 Justin Sweet
 Joseph Casario
 Cheryl Austin
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 Arlene Sommer
 George Almond
 Erik Jamison
 Helena Wickberg
 James Doyle (Apples Animation)
 Scott Rodenhizer
Clay Modeller Tony Postma
Conceptual Artist

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 Scott Bennis
 Brian Freymuth
 Scott Campbell
Technical Designer Scott Everts
Additional Design By Robert Herstein 2
 Jess Hainig
 Nick Kesting
 Mark O'Green
 Tim Cain
 Leonard Boyarsky
 Jason Anderson
 Chris Taylor
 Jason Taylor
 Scott Campbell

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 Chris Jones
Programmers Jesse L. Reynolds
 Kevin Weatherman
 Nick Kesting
 Robert Herstein 2
 Jess Hainig
 Jason Taylor
 Tim Hume
Mac Programmer Mark Harrison
Additional Programming By Lizard Byte
 John Price
 Chris DeSalvo
 Mark Murakami
 Paul Edelstein

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Assistant Director of QA Colin Tatham
PC Version Lead Testers Ron Hodge
 Greg "Moose" Baunmeister
PC Version Testers Shanna SanPaolo
 Evan Chantland
 Ed Hyland
 Steve Reed
 James Chung
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 Bill Field
 Richard Barker
 Rene Hakiki
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 Matt Kaupa
 Steve Victory
 Scot Humphreys
 Tim Anderson
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 Kaycee Vardaman
 Scot Humphreys
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 Bill Dalk
LS Technicians Steve Cabiness
Director of Compatibility Phuong Nguyen
Compatibility Technicians Marc Duran
 Dan Forsyth
 Derek Gibbs
 Aaron O'Neil
 John Parker

AUDIO

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Audio Mastering.....	Craig Duman
Background TV music.....	Ronald Valdez
Cinematics Re-recording Mixer.....	Dave West
Cinematics Soundeffects.....	West Productions
Foley Artists.....	Doug Turner
	Gary Murello
	Larry Peacock
Foley Editor.....	Caron Weidner
Foley Mixer.....	Debby Ruby
Foley Mixer/Artist.....	Cecilia Perna
Foley Recorded at.....	West Productions
Foley Supervision.....	Charles Deenen
	Larry Peacock
FX Editor.....	Michael Dickeson
Music By.....	Mark Morgan for
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Intro Re-Recording Mixer.....	Charles Deenen
Music Supervisor.....	Brian Luzietti
Sound FX Librarians.....	Doug Rappaport
	Sergio Bustamante II
	Ron Valdez
Sound FX Designers.....	Charles Deenen
	Gregory Allen
	Larry Peacock
	EFX
	Weddington
	Caron Weidner
Voice Editors.....	Doug Rappaport
	Sergio Bustamante II
Voice Producer.....	Fred Hatch
Voice Recording Engineer.....	Paul Hurtubise
Voice Supervisor.....	Chris Borders
Voice Talent Coordination.....	Julie Margavi
Voice Dialogue Recorded At.....	Hollywood
	Recording Services
	Hollywood, CA
Voice Direction.....	Jamie Thomason

FEATURING THE VOICES OF

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Killian.....	Richard Dean Anderson
Loxley.....	Jeff Bennett
Rhombus.....	Clancy Brown
Set, Gizmo, The Master.....	Jim Cummings
Decker.....	Keith David
Harry.....	Brad Garrett
The Lieutenant.....	Tony Jay
Jain.....	Tress MacNeille
Overseer.....	Ken Mars
Cabbot.....	Richard Moll
Butch Harris, Narrator.....	Ron Perlman
Vree.....	CCH Pounder
Nichole.....	Pam Segall
Aradesh.....	Tony Shalub
Laura, The Master.....	Kath Soucie
Tandi.....	Cree Summer
Morpheus.....	David Warner
Maxson.....	Frank Welker

"Maybe"

Performed by Ink Spots

Courtesy of MCA Records

By Arrangement with Universal Music Special Markets, Inc.

MAYBE

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Associate Marketing Manager.....	Tad Mock
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Sections from the High Energy Weapons FAQ by Carey Sublette used with permission. Some changes were made to fit the background of Fallout.

Thanks to: Scott Everts for contributing above and beyond the call of duty to the Quote File, Brian Eno, the soda fridge (thanks Gus & Rusty!), the Spirit of Christmas (Go Samu!), Demo the cat, Nicol, Tracy & Korey, Mary & Adana, Lisa (for moral support), Jamal T-Ray's Mom, the two Donalds, and Teresa Brooks.

Special thanks to the Fallout webpage bulletin board members for comments, suggestions and bug reports about the demo. Your feedback was appreciated!

APPENDIX 6: SURVIVAL RECIPES

Mushroom Clouds

(preheat oven to 200 degrees Fahrenheit)

3-4 egg whites (at room temperature)
1/4 tsp cream of tartar
1 cup superfine sugar*

cocoa
8 oz dark chocolate
(bittersweet or semi-sweet)

Beat the eggs and tartar with an electric mixer until soft peaks form. Add the sugar a little at a time while continuing to beat, until all the sugar is in and the mixture is glossy and stiff.

Using a piping bag with a no. 8 tip, pipe out an equal number of caps and stems onto an ungreased non-stick cookie sheet. The caps should be about the diameter of a quarter, and the stems should be about an inch high and the diameter of a soda straw.

Sprinkle cocoa over the caps and stems, and then blow on them to spread out the cocoa more evenly. You may want to do this outside, as cocoa goes everywhere.

Bake for 2 hours at 200 degrees.

Carefully remove the caps and stems from the cookie sheet. With a dull knife, snip the top of each stem so it has a flat top surface.

Melt the chocolate (in a double boiler or microwave). Spread the chocolate on the base of each cap with a butter knife or spatula, and use it to glue a stem in place. Put the assembled mushrooms in the refrigerator for 20 minutes to harden the chocolate, then put them in an airtight container.

Makes 3-4 dozen.



Desert Salad

(Increase or reduce ingredient portions to taste)

1 lb. extra lean ground beef
(turkey may be substituted)
1/2 head of iceberg lettuce, cut
3 oz. pinto beans
6 oz. sliced olives
4 oz. cheddar cheese

6 oz. tortilla chips
1 firm tomato
1 16oz. bottle of Catalina
dressing
1 avocado (optional)

Brown the meat, drain.

In large bowl, mix lettuce, beans, and olives. Crush chips and add. Cut tomato into small chunks and add to bowl. Shred cheese and add. Slice avocado and add. Add meat. Toss with dressing. Serve.

Makes 4-6 portions.

*superfine sugar is NOT confectioner's sugar or 10X sugar. If you cannot find superfine sugar, it's easy to make. Just put granulated sugar in a blender or food processor, and blend for 1 minute.

APPENDIX 7: QUICK KEYS

	Character Screen		Use Traps Skill
	Inventory		Use First Aid Skill
	PIPBoy 2000 Main Screen		Use Doctor Skill
	PIPBoy Clock		Use Science Skill
or	Options		Use Repair Skill
	Toggle Active Items		Show Date and Time
	Toggle Mouse Mode		Rotate Counterclockwise
	Toggle Active Item Mode		Rotate Clockwise
	Skilldex		Combat: End Turn
	Use Sneak Skill		Combat: End Combat -or- Non Combat: DONE
	Use Lockpick Skill		
	Use Steel Skill		Automap
			Center Screen on PC

	Decrease Brightness		Quick Save
	Increase Brightness		Quick Load
	Help	or +	Exit to Main Menu
	Master Volume Down		
	Master Volume Up		Save Screenshot
or +	Save Game	+	Pause
or +	Load Game		

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